

A

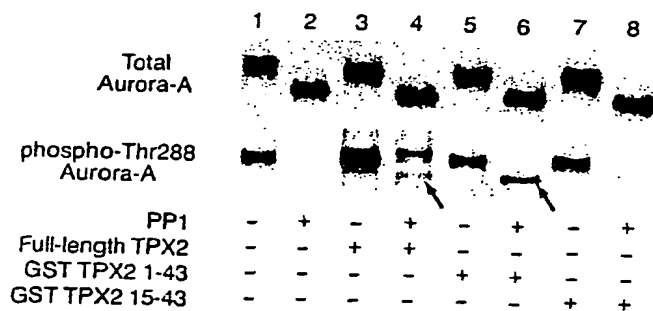


Fig. 2

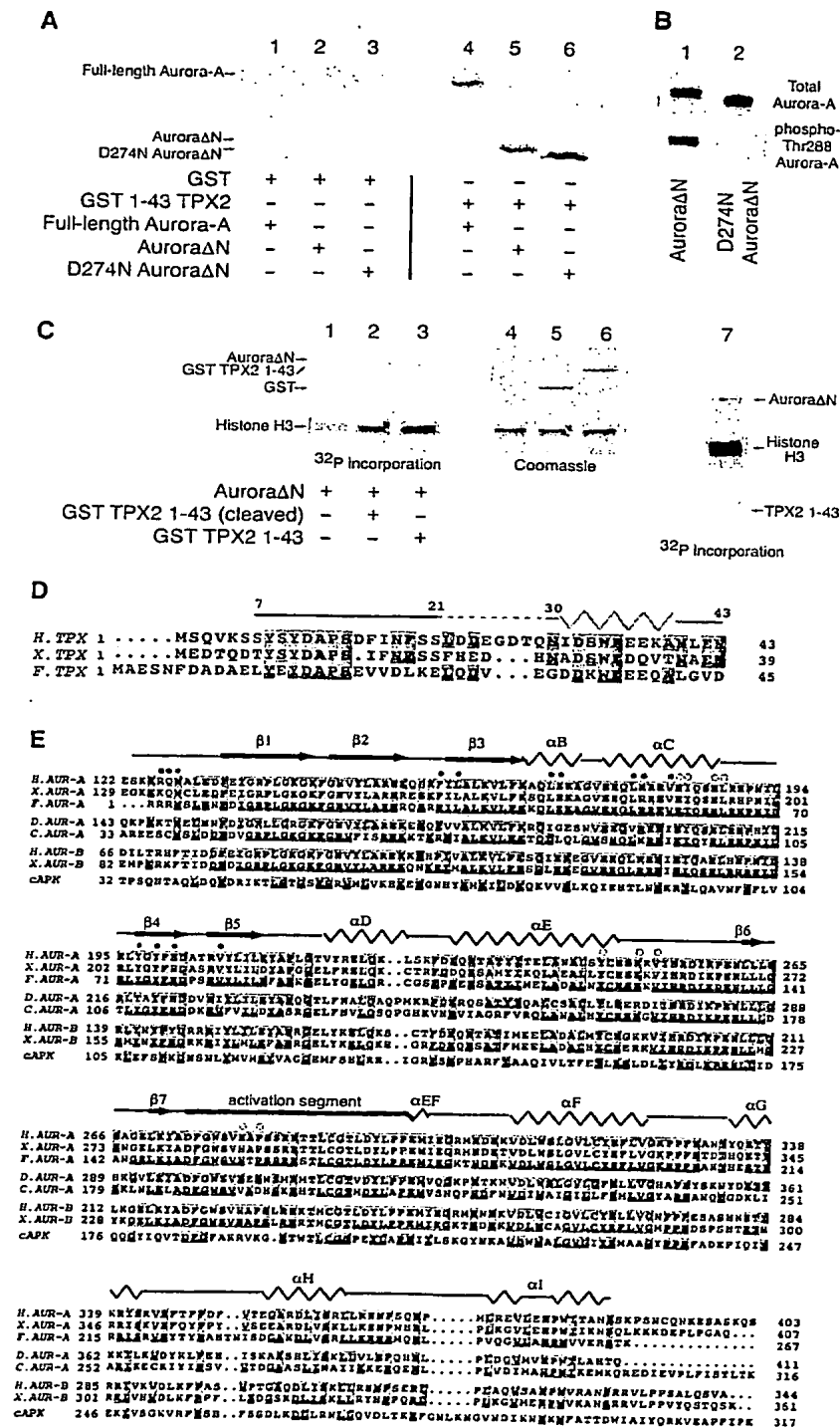


Fig. 3

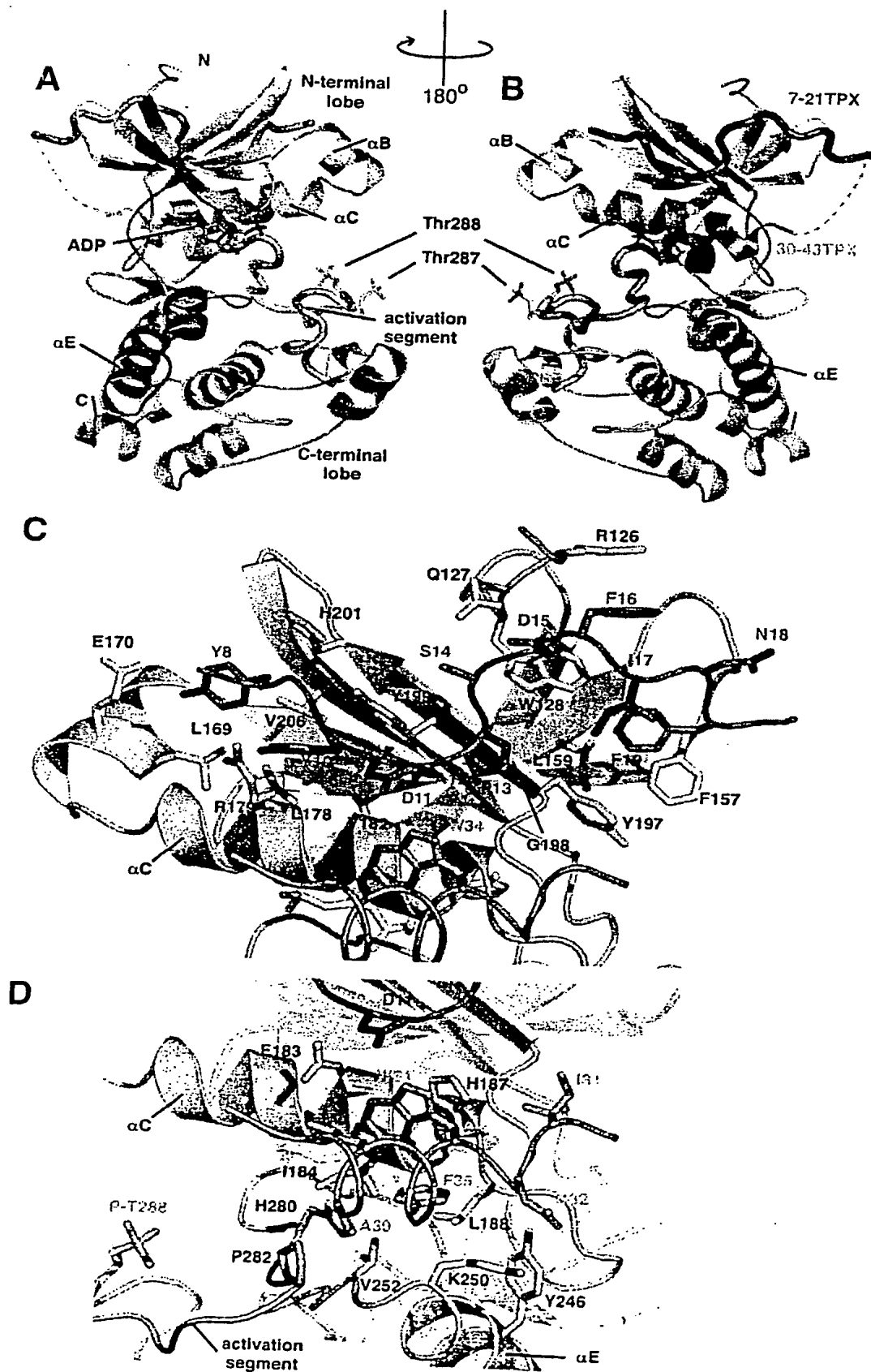


Fig. 4

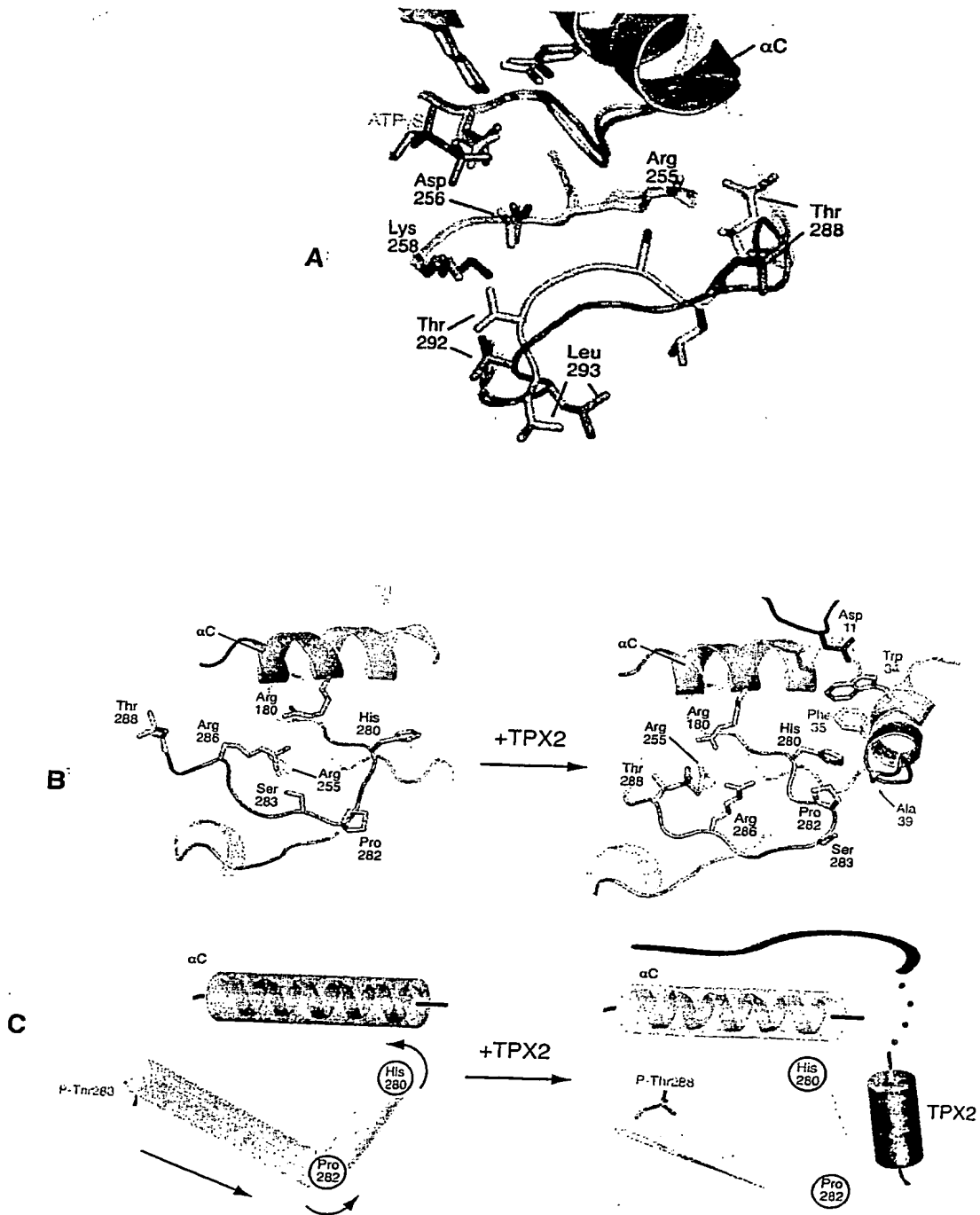


Fig. 5

Table A

| | | | | | | | | | | | | |
|------|----|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 1 | CB | GLN | A | 127 | 267.519 | -61.189 | 87.734 | 1.00 | 66.58 | A | C |
| ATOM | 2 | CG | GLN | A | 127 | 266.971 | -61.391 | 86.330 | 1.00 | 76.29 | A | C |
| ATOM | 3 | CD | GLN | A | 127 | 266.372 | -60.121 | 85.741 | 1.00 | 79.34 | A | C |
| ATOM | 4 | OE1 | GLN | A | 127 | 265.589 | -60.183 | 84.781 | 1.00 | 82.34 | A | O |
| ATOM | 5 | NE2 | GLN | A | 127 | 266.735 | -58.962 | 86.307 | 1.00 | 82.40 | A | N |
| ATOM | 6 | C | GLN | A | 127 | 269.192 | -59.883 | 89.051 | 1.00 | 63.35 | A | C |
| ATOM | 7 | O | GLN | A | 127 | 269.877 | -58.853 | 89.024 | 1.00 | 70.04 | A | O |
| ATOM | 8 | N | GLN | A | 127 | 269.910 | -61.949 | 87.808 | 1.00 | 58.04 | A | N |
| ATOM | 9 | CA | GLN | A | 127 | 269.002 | -60.755 | 87.810 | 1.00 | 67.74 | A | C |
| ATOM | 10 | N | TRP | A | 128 | 268.566 | -60.307 | 90.137 | 1.00 | 61.21 | A | N |
| ATOM | 11 | CA | TRP | A | 128 | 268.621 | -59.552 | 91.366 | 1.00 | 53.96 | A | C |
| ATOM | 12 | CB | TRP | A | 128 | 267.315 | -59.733 | 92.133 | 1.00 | 50.38 | A | C |
| ATOM | 13 | CG | TRP | A | 128 | 266.140 | -59.256 | 91.369 | 1.00 | 49.11 | A | C |
| ATOM | 14 | CD2 | TRP | A | 128 | 265.908 | -57.928 | 90.897 | 1.00 | 50.34 | A | C |
| ATOM | 15 | CE2 | TRP | A | 128 | 264.697 | -57.962 | 90.150 | 1.00 | 53.33 | A | C |
| ATOM | 16 | CE3 | TRP | A | 128 | 266.611 | -56.713 | 91.017 | 1.00 | 53.44 | A | C |
| ATOM | 17 | CD1 | TRP | A | 128 | 265.096 | -60.014 | 90.921 | 1.00 | 47.17 | A | C |
| ATOM | 18 | NE1 | TRP | A | 128 | 264.228 | -59.249 | 90.191 | 1.00 | 49.20 | A | N |
| ATOM | 19 | CZ2 | TRP | A | 128 | 264.160 | -56.816 | 89.514 | 1.00 | 56.77 | A | C |
| ATOM | 20 | CZ3 | TRP | A | 128 | 266.094 | -55.571 | 90.392 | 1.00 | 60.23 | A | C |
| ATOM | 21 | CH2 | TRP | A | 128 | 264.869 | -55.633 | 89.639 | 1.00 | 61.57 | A | C |
| ATOM | 22 | C | TRP | A | 128 | 269.787 | -59.909 | 92.262 | 1.00 | 54.43 | A | C |
| ATOM | 23 | O | TRP | A | 128 | 270.317 | -61.026 | 92.231 | 1.00 | 54.76 | A | O |
| ATOM | 24 | N | ALA | A | 129 | 270.184 | -58.955 | 93.085 | 1.00 | 55.48 | A | N |
| ATOM | 25 | CA | ALA | A | 129 | 271.283 | -59.206 | 94.006 | 1.00 | 60.01 | A | C |
| ATOM | 26 | CB | ALA | A | 129 | 272.608 | -58.800 | 93.341 | 1.00 | 66.60 | A | C |
| ATOM | 27 | C | ALA | A | 129 | 271.010 | -58.371 | 95.258 | 1.00 | 56.86 | A | C |
| ATOM | 28 | O | ALA | A | 129 | 270.365 | -57.326 | 95.173 | 1.00 | 59.08 | A | O |
| ATOM | 29 | N | LEU | A | 130 | 271.517 | -58.821 | 96.401 | 1.00 | 51.68 | A | N |
| ATOM | 30 | CA | LEU | A | 130 | 271.314 | -58.126 | 97.665 | 1.00 | 53.06 | A | C |
| ATOM | 31 | CB | LEU | A | 130 | 272.108 | -58.770 | 98.787 | 1.00 | 43.18 | A | C |
| ATOM | 32 | CG | LEU | A | 130 | 272.080 | -58.110 | 100.164 | 1.00 | 36.68 | A | C |
| ATOM | 33 | CD1 | LEU | A | 130 | 270.621 | -57.934 | 100.570 | 1.00 | 47.13 | A | C |
| ATOM | 34 | CD2 | LEU | A | 130 | 272.839 | -58.975 | 101.186 | 1.00 | 38.64 | A | C |
| ATOM | 35 | C | LEU | A | 130 | 271.750 | -56.702 | 97.591 | 1.00 | 55.17 | A | C |
| ATOM | 36 | O | LEU | A | 130 | 271.223 | -55.834 | 98.305 | 1.00 | 61.19 | A | O |
| ATOM | 37 | N | GLU | A | 131 | 272.686 | -56.469 | 96.690 | 1.00 | 58.94 | A | N |
| ATOM | 38 | CA | GLU | A | 131 | 273.276 | -55.172 | 96.539 | 1.00 | 57.04 | A | C |
| ATOM | 39 | CB | GLU | A | 131 | 274.689 | -55.400 | 96.030 | 1.00 | 63.45 | A | C |
| ATOM | 40 | CG | GLU | A | 131 | 275.441 | -56.450 | 96.938 | 1.00 | 73.38 | A | C |
| ATOM | 41 | CD | GLU | A | 131 | 275.249 | -57.909 | 96.486 | 1.00 | 79.54 | A | C |
| ATOM | 42 | OE1 | GLU | A | 131 | 274.529 | -58.142 | 95.477 | 1.00 | 80.97 | A | O |
| ATOM | 43 | OE2 | GLU | A | 131 | 275.838 | -58.820 | 97.135 | 1.00 | 88.53 | A | O |
| ATOM | 44 | C | GLU | A | 131 | 272.458 | -54.235 | 95.682 | 1.00 | 55.07 | A | C |
| ATOM | 45 | O | GLU | A | 131 | 272.851 | -53.119 | 95.439 | 1.00 | 51.83 | A | O |
| ATOM | 46 | N | ASP | A | 132 | 271.280 | -54.704 | 95.299 | 1.00 | 53.60 | A | N |
| ATOM | 47 | CA | ASP | A | 132 | 270.298 | -53.994 | 94.487 | 1.00 | 58.59 | A | C |
| ATOM | 48 | CB | ASP | A | 132 | 269.514 | -54.987 | 93.656 | 1.00 | 69.09 | A | C |
| ATOM | 49 | CG | ASP | A | 132 | 270.030 | -55.141 | 92.284 | 1.00 | 68.36 | A | C |
| ATOM | 50 | OD1 | ASP | A | 132 | 269.776 | -54.250 | 91.447 | 1.00 | 73.44 | A | O |
| ATOM | 51 | OD2 | ASP | A | 132 | 270.704 | -56.159 | 92.048 | 1.00 | 76.16 | A | O |
| ATOM | 52 | C | ASP | A | 132 | 269.267 | -53.412 | 95.449 | 1.00 | 59.74 | A | C |
| ATOM | 53 | O | ASP | A | 132 | 268.472 | -52.547 | 95.093 | 1.00 | 56.43 | A | O |
| ATOM | 54 | N | PHE | A | 133 | 269.239 | -53.925 | 96.666 | 1.00 | 62.15 | A | N |
| ATOM | 55 | CA | PHE | A | 133 | 268.239 | -53.448 | 97.598 | 1.00 | 62.91 | A | C |
| ATOM | 56 | CB | PHE | A | 133 | 267.324 | -54.622 | 97.974 | 1.00 | 59.55 | A | C |
| ATOM | 57 | CG | PHE | A | 133 | 266.737 | -55.337 | 96.775 | 1.00 | 61.26 | A | C |
| ATOM | 58 | CD1 | PHE | A | 133 | 267.467 | -56.312 | 96.095 | 1.00 | 60.00 | A | C |
| ATOM | 59 | CD2 | PHE | A | 133 | 265.442 | -55.059 | 96.346 | 1.00 | 60.03 | A | C |
| ATOM | 60 | CE1 | PHE | A | 133 | 266.910 | -56.996 | 94.991 | 1.00 | 65.06 | A | C |
| ATOM | 61 | CE2 | PHE | A | 133 | 264.883 | -55.719 | 95.264 | 1.00 | 60.82 | A | C |
| ATOM | 62 | CZ | PHE | A | 133 | 265.607 | -56.697 | 94.585 | 1.00 | 61.32 | A | C |

| | | | | | | | | | | | | |
|------|-----|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 63 | C | PHE | A | 133 | 268.740 | -52.733 | 98.847 | 1.00 | 61.07 | A | C |
| ATOM | 64 | O | PHE | A | 133 | 269.866 | -52.972 | 99.318 | 1.00 | 66.24 | A | O |
| ATOM | 65 | N | GLU | A | 134 | 267.878 | -51.829 | 99.340 | 1.00 | 59.55 | A | N |
| ATOM | 66 | CA | GLU | A | 134 | 268.062 | -51.035 | 100.573 | 1.00 | 58.90 | A | C |
| ATOM | 67 | CB | GLU | A | 134 | 267.589 | -49.593 | 100.353 | 1.00 | 54.77 | A | C |
| ATOM | 68 | CG | GLU | A | 134 | 268.478 | -48.772 | 99.488 | 1.00 | 63.45 | A | C |
| ATOM | 69 | CD | GLU | A | 134 | 268.205 | -47.282 | 99.556 | 1.00 | 61.84 | A | C |
| ATOM | 70 | OE1 | GLU | A | 134 | 268.808 | -46.576 | 100.384 | 1.00 | 75.06 | A | O |
| ATOM | 71 | OE2 | GLU | A | 134 | 267.388 | -46.803 | 98.768 | 1.00 | 73.27 | A | O |
| ATOM | 72 | C | GLU | A | 134 | 267.139 | -51.698 | 101.627 | 1.00 | 53.85 | A | C |
| ATOM | 73 | O | GLU | A | 134 | 265.909 | -51.607 | 101.526 | 1.00 | 60.03 | A | O |
| ATOM | 74 | N | ILE | A | 135 | 267.713 | -52.362 | 102.621 | 1.00 | 52.32 | A | N |
| ATOM | 75 | CA | ILE | A | 135 | 266.917 | -53.042 | 103.625 | 1.00 | 50.89 | A | C |
| ATOM | 76 | CB | ILE | A | 135 | 267.750 | -54.131 | 104.343 | 1.00 | 48.23 | A | C |
| ATOM | 77 | CG2 | ILE | A | 135 | 266.828 | -55.078 | 105.127 | 1.00 | 51.35 | A | C |
| ATOM | 78 | CG1 | ILE | A | 135 | 268.552 | -54.940 | 103.317 | 1.00 | 48.00 | A | C |
| ATOM | 79 | CD1 | ILE | A | 135 | 267.731 | -55.720 | 102.398 | 1.00 | 35.46 | A | C |
| ATOM | 80 | C | ILE | A | 135 | 266.298 | -52.129 | 104.674 | 1.00 | 50.54 | A | C |
| ATOM | 81 | O | ILE | A | 135 | 266.973 | -51.281 | 105.250 | 1.00 | 50.32 | A | O |
| ATOM | 82 | N | GLY | A | 136 | 265.004 | -52.334 | 104.924 | 1.00 | 49.85 | A | N |
| ATOM | 83 | CA | GLY | A | 136 | 264.286 | -51.534 | 105.903 | 1.00 | 44.78 | A | C |
| ATOM | 84 | C | GLY | A | 136 | 264.165 | -52.255 | 107.228 | 1.00 | 44.85 | A | C |
| ATOM | 85 | O | GLY | A | 136 | 265.040 | -53.071 | 107.574 | 1.00 | 45.10 | A | O |
| ATOM | 86 | N | ARG | A | 137 | 263.071 | -51.996 | 107.940 | 1.00 | 40.54 | A | N |
| ATOM | 87 | CA | ARG | A | 137 | 262.891 | -52.598 | 109.248 | 1.00 | 47.22 | A | C |
| ATOM | 88 | CB | ARG | A | 137 | 261.911 | -51.766 | 110.065 | 1.00 | 46.15 | A | C |
| ATOM | 89 | CG | ARG | A | 137 | 260.481 | -51.887 | 109.585 | 1.00 | 46.77 | A | C |
| ATOM | 90 | CD | ARG | A | 137 | 259.521 | -51.284 | 110.589 | 1.00 | 47.76 | A | C |
| ATOM | 91 | NE | ARG | A | 137 | 258.174 | -51.283 | 110.058 | 1.00 | 44.18 | A | N |
| ATOM | 92 | CZ | ARG | A | 137 | 257.364 | -52.330 | 110.097 | 1.00 | 49.13 | A | C |
| ATOM | 93 | NH1 | ARG | A | 137 | 257.779 | -53.468 | 110.655 | 1.00 | 50.41 | A | N |
| ATOM | 94 | NH2 | ARG | A | 137 | 256.144 | -52.230 | 109.579 | 1.00 | 42.98 | A | N |
| ATOM | 95 | C | ARG | A | 137 | 262.358 | -54.014 | 109.150 | 1.00 | 48.40 | A | C |
| ATOM | 96 | O | ARG | A | 137 | 261.734 | -54.370 | 108.150 | 1.00 | 52.53 | A | O |
| ATOM | 97 | N | PRO | A | 138 | 262.589 | -54.840 | 110.190 | 1.00 | 48.54 | A | N |
| ATOM | 98 | CD | PRO | A | 138 | 263.443 | -54.581 | 111.363 | 1.00 | 46.06 | A | C |
| ATOM | 99 | CA | PRO | A | 138 | 262.108 | -56.226 | 110.213 | 1.00 | 46.02 | A | C |
| ATOM | 100 | CB | PRO | A | 138 | 262.685 | -56.765 | 111.524 | 1.00 | 49.55 | A | C |
| ATOM | 101 | CG | PRO | A | 138 | 263.905 | -55.955 | 111.710 | 1.00 | 42.97 | A | C |
| ATOM | 102 | C | PRO | A | 138 | 260.561 | -56.262 | 110.207 | 1.00 | 49.85 | A | C |
| ATOM | 103 | O | PRO | A | 138 | 259.920 | -55.810 | 111.142 | 1.00 | 50.42 | A | O |
| ATOM | 104 | N | LEU | A | 139 | 259.980 | -56.799 | 109.138 | 1.00 | 45.75 | A | N |
| ATOM | 105 | CA | LEU | A | 139 | 258.545 | -56.896 | 109.005 | 1.00 | 39.58 | A | C |
| ATOM | 106 | CB | LEU | A | 139 | 258.181 | -57.130 | 107.558 | 1.00 | 37.24 | A | C |
| ATOM | 107 | CG | LEU | A | 139 | 258.109 | -55.885 | 106.664 | 1.00 | 42.68 | A | C |
| ATOM | 108 | CD1 | LEU | A | 139 | 257.816 | -56.315 | 105.170 | 1.00 | 32.13 | A | C |
| ATOM | 109 | CD2 | LEU | A | 139 | 256.990 | -54.961 | 107.170 | 1.00 | 43.77 | A | C |
| ATOM | 110 | C | LEU | A | 139 | 257.968 | -58.002 | 109.880 | 1.00 | 40.81 | A | C |
| ATOM | 111 | O | LEU | A | 139 | 256.907 | -57.861 | 110.480 | 1.00 | 45.92 | A | O |
| ATOM | 112 | N | GLY | A | 140 | 258.675 | -59.111 | 109.970 | 1.00 | 45.15 | A | N |
| ATOM | 113 | CA | GLY | A | 140 | 258.198 | -60.218 | 110.789 | 1.00 | 48.82 | A | C |
| ATOM | 114 | C | GLY | A | 140 | 259.222 | -61.317 | 111.040 | 1.00 | 48.37 | A | C |
| ATOM | 115 | O | GLY | A | 140 | 260.326 | -61.310 | 110.492 | 1.00 | 53.08 | A | O |
| ATOM | 116 | N | LYS | A | 141 | 258.842 | -62.283 | 111.856 | 1.00 | 52.66 | A | N |
| ATOM | 117 | CA | LYS | A | 141 | 259.740 | -63.376 | 112.192 | 1.00 | 56.79 | A | C |
| ATOM | 118 | CB | LYS | A | 141 | 259.961 | -63.404 | 113.707 | 1.00 | 61.89 | A | C |
| ATOM | 119 | CG | LYS | A | 141 | 260.862 | -64.513 | 114.210 | 1.00 | 68.25 | A | C |
| ATOM | 120 | CD | LYS | A | 141 | 260.894 | -64.538 | 115.750 | 1.00 | 78.79 | A | C |
| ATOM | 121 | CE | LYS | A | 141 | 261.863 | -65.624 | 116.242 | 1.00 | 83.42 | A | C |
| ATOM | 122 | NZ | LYS | A | 141 | 261.987 | -65.651 | 117.745 | 1.00 | 90.84 | A | N |
| ATOM | 123 | C | LYS | A | 141 | 259.219 | -64.728 | 111.704 | 1.00 | 57.82 | A | C |
| ATOM | 124 | O | LYS | A | 141 | 258.150 | -65.199 | 112.084 | 1.00 | 57.17 | A | O |
| ATOM | 125 | N | GLY | A | 142 | 259.990 | -65.342 | 110.823 | 1.00 | 63.79 | A | N |
| ATOM | 126 | CA | GLY | A | 142 | 259.627 | -66.648 | 110.315 | 1.00 | 67.77 | A | C |
| ATOM | 127 | C | GLY | A | 142 | 260.381 | -67.717 | 111.087 | 1.00 | 68.12 | A | C |
| ATOM | 128 | O | GLY | A | 142 | 260.756 | -67.533 | 112.255 | 1.00 | 76.19 | A | O |
| ATOM | 129 | N | LYS | A | 143 | 260.638 | -68.829 | 110.410 | 1.00 | 66.29 | A | N |
| ATOM | 130 | CA | LYS | A | 143 | 261.359 | -69.941 | 111.016 | 1.00 | 62.91 | A | C |
| ATOM | 131 | CB | LYS | A | 143 | 260.576 | -71.221 | 110.783 | 1.00 | 56.50 | A | C |
| ATOM | 132 | CG | LYS | A | 143 | 260.990 | -72.331 | 111.694 | 1.00 | 59.59 | A | C |

| | | | | | | | | | | | | |
|------|-----|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 133 | CD | LYS | A | 143 | 259.804 | -73.170 | 112.130 | 1.00 | 65.95 | A | C |
| ATOM | 134 | CE | LYS | A | 143 | 260.182 | -74.141 | 113.303 | 1.00 | 69.37 | A | C |
| ATOM | 135 | NZ | LYS | A | 143 | 259.069 | -75.109 | 113.596 | 1.00 | 70.95 | A | N |
| ATOM | 136 | C | LYS | A | 143 | 262.773 | -70.081 | 110.500 | 1.00 | 62.52 | A | C |
| ATOM | 137 | O | LYS | A | 143 | 263.725 | -70.302 | 111.243 | 1.00 | 61.60 | A | O |
| ATOM | 138 | N | PHE | A | 144 | 262.909 | -69.898 | 109.200 | 1.00 | 68.60 | A | N |
| ATOM | 139 | CA | PHE | A | 144 | 264.215 | -70.021 | 108.556 | 1.00 | 74.62 | A | C |
| ATOM | 140 | CB | PHE | A | 144 | 264.109 | -70.886 | 107.296 | 1.00 | 69.32 | A | C |
| ATOM | 141 | CG | PHE | A | 144 | 263.583 | -72.278 | 107.565 | 1.00 | 69.58 | A | C |
| ATOM | 142 | CD1 | PHE | A | 144 | 262.211 | -72.526 | 107.690 | 1.00 | 66.23 | A | C |
| ATOM | 143 | CD2 | PHE | A | 144 | 264.460 | -73.335 | 107.731 | 1.00 | 63.51 | A | C |
| ATOM | 144 | CE1 | PHE | A | 144 | 261.738 | -73.816 | 107.978 | 1.00 | 73.24 | A | C |
| ATOM | 145 | CE2 | PHE | A | 144 | 263.985 | -74.608 | 108.014 | 1.00 | 69.83 | A | C |
| ATOM | 146 | CZ | PHE | A | 144 | 262.629 | -74.850 | 108.138 | 1.00 | 66.31 | A | C |
| ATOM | 147 | C | PHE | A | 144 | 264.768 | -68.665 | 108.234 | 1.00 | 74.80 | A | C |
| ATOM | 148 | O | PHE | A | 144 | 265.636 | -68.496 | 107.395 | 1.00 | 82.71 | A | O |
| ATOM | 149 | N | GLY | A | 145 | 264.248 | -67.691 | 108.955 | 1.00 | 83.57 | A | N |
| ATOM | 150 | CA | GLY | A | 145 | 264.676 | -66.320 | 108.782 | 1.00 | 77.10 | A | C |
| ATOM | 151 | C | GLY | A | 145 | 263.544 | -65.296 | 108.827 | 1.00 | 75.14 | A | C |
| ATOM | 152 | O | GLY | A | 145 | 262.338 | -65.557 | 108.521 | 1.00 | 74.64 | A | O |
| ATOM | 153 | N | ASN | A | 146 | 263.966 | -64.097 | 109.195 | 1.00 | 67.46 | A | N |
| ATOM | 154 | CA | ASN | A | 146 | 263.050 | -62.976 | 109.318 | 1.00 | 65.84 | A | C |
| ATOM | 155 | CB | ASN | A | 146 | 263.674 | -61.895 | 110.208 | 1.00 | 68.52 | A | C |
| ATOM | 156 | CG | ASN | A | 146 | 263.873 | -62.369 | 111.664 | 1.00 | 74.23 | A | C |
| ATOM | 157 | OD1 | ASN | A | 146 | 264.045 | -63.577 | 111.946 | 1.00 | 76.10 | A | O |
| ATOM | 158 | ND2 | ASN | A | 146 | 263.871 | -61.415 | 112.588 | 1.00 | 74.93 | A | N |
| ATOM | 159 | C | ASN | A | 146 | 262.727 | -62.402 | 107.955 | 1.00 | 60.10 | A | C |
| ATOM | 160 | O | ASN | A | 146 | 263.442 | -62.661 | 106.979 | 1.00 | 60.40 | A | O |
| ATOM | 161 | N | VAL | A | 147 | 261.651 | -61.614 | 107.909 | 1.00 | 49.34 | A | N |
| ATOM | 162 | CA | VAL | A | 147 | 261.208 | -60.938 | 106.697 | 1.00 | 34.29 | A | C |
| ATOM | 163 | CB | VAL | A | 147 | 259.691 | -61.195 | 106.433 | 1.00 | 35.55 | A | C |
| ATOM | 164 | CG1 | VAL | A | 147 | 259.202 | -60.303 | 105.293 | 1.00 | 22.76 | A | C |
| ATOM | 165 | CG2 | VAL | A | 147 | 259.444 | -62.657 | 106.040 | 1.00 | 25.36 | A | C |
| ATOM | 166 | C | VAL | A | 147 | 261.432 | -59.427 | 106.905 | 1.00 | 36.01 | A | C |
| ATOM | 167 | O | VAL | A | 147 | 261.071 | -58.888 | 107.912 | 1.00 | 33.80 | A | O |
| ATOM | 168 | N | TYR | A | 148 | 262.006 | -58.743 | 105.931 | 1.00 | 38.73 | A | N |
| ATOM | 169 | CA | TYR | A | 148 | 262.298 | -57.313 | 106.040 | 1.00 | 38.16 | A | C |
| ATOM | 170 | CB | TYR | A | 148 | 263.815 | -57.053 | 105.947 | 1.00 | 44.86 | A | C |
| ATOM | 171 | CG | TYR | A | 148 | 264.625 | -57.783 | 106.981 | 1.00 | 51.34 | A | C |
| ATOM | 172 | CD1 | TYR | A | 148 | 264.946 | -59.110 | 106.823 | 1.00 | 49.12 | A | C |
| ATOM | 173 | CE1 | TYR | A | 148 | 265.660 | -59.799 | 107.804 | 1.00 | 57.49 | A | C |
| ATOM | 174 | CD2 | TYR | A | 148 | 265.035 | -57.152 | 108.146 | 1.00 | 56.42 | A | C |
| ATOM | 175 | CE2 | TYR | A | 148 | 265.743 | -57.839 | 109.136 | 1.00 | 62.05 | A | C |
| ATOM | 176 | CZ | TYR | A | 148 | 266.051 | -59.159 | 108.958 | 1.00 | 59.22 | A | C |
| ATOM | 177 | OH | TYR | A | 148 | 266.740 | -59.818 | 109.951 | 1.00 | 62.90 | A | O |
| ATOM | 178 | C | TYR | A | 148 | 261.647 | -56.485 | 104.972 | 1.00 | 40.31 | A | C |
| ATOM | 179 | O | TYR | A | 148 | 261.240 | -56.989 | 103.910 | 1.00 | 39.68 | A | O |
| ATOM | 180 | N | LEU | A | 149 | 261.564 | -55.187 | 105.254 | 1.00 | 37.70 | A | N |
| ATOM | 181 | CA | LEU | A | 149 | 260.992 | -54.236 | 104.287 | 1.00 | 36.17 | A | C |
| ATOM | 182 | CB | LEU | A | 149 | 260.495 | -52.976 | 105.019 | 1.00 | 38.73 | A | C |
| ATOM | 183 | CG | LEU | A | 149 | 259.781 | -51.920 | 104.186 | 1.00 | 39.39 | A | C |
| ATOM | 184 | CD1 | LEU | A | 149 | 258.437 | -52.465 | 103.793 | 1.00 | 46.05 | A | C |
| ATOM | 185 | CD2 | LEU | A | 149 | 259.655 | -50.660 | 104.957 | 1.00 | 40.68 | A | C |
| ATOM | 186 | C | LEU | A | 149 | 262.212 | -53.920 | 103.405 | 1.00 | 35.83 | A | C |
| ATOM | 187 | O | LEU | A | 149 | 263.340 | -54.217 | 103.822 | 1.00 | 37.60 | A | O |
| ATOM | 188 | N | ALA | A | 150 | 262.029 | -53.321 | 102.228 | 1.00 | 37.02 | A | N |
| ATOM | 189 | CA | ALA | A | 150 | 263.171 | -53.041 | 101.363 | 1.00 | 35.35 | A | C |
| ATOM | 190 | CB | ALA | A | 150 | 263.889 | -54.345 | 100.965 | 1.00 | 48.80 | A | C |
| ATOM | 191 | C | ALA | A | 150 | 262.746 | -52.334 | 100.123 | 1.00 | 44.17 | A | C |
| ATOM | 192 | O | ALA | A | 150 | 261.665 | -52.604 | 99.566 | 1.00 | 41.00 | A | O |
| ATOM | 193 | N | ARG | A | 151 | 263.619 | -51.441 | 99.666 | 1.00 | 47.00 | A | N |
| ATOM | 194 | CA | ARG | A | 151 | 263.319 | -50.674 | 98.468 | 1.00 | 50.37 | A | C |
| ATOM | 195 | CB | ARG | A | 151 | 263.377 | -49.171 | 98.793 | 1.00 | 53.91 | A | C |
| ATOM | 196 | CG | ARG | A | 151 | 262.912 | -48.272 | 97.649 | 1.00 | 53.96 | A | C |
| ATOM | 197 | CD | ARG | A | 151 | 262.834 | -46.817 | 98.014 | 1.00 | 57.39 | A | C |
| ATOM | 198 | NE | ARG | A | 151 | 264.145 | -46.372 | 98.607 | 1.00 | 58.37 | A | N |
| ATOM | 199 | CZ | ARG | A | 151 | 264.561 | -45.110 | 98.572 | 1.00 | 58.07 | A | C |
| ATOM | 200 | NH1 | ARG | A | 151 | 263.814 | -44.175 | 97.969 | 1.00 | 56.20 | A | N |
| ATOM | 201 | NH2 | ARG | A | 151 | 265.718 | -44.793 | 99.131 | 1.00 | 55.48 | A | N |
| ATOM | 202 | C | ARG | A | 151 | 264.311 | -51.021 | 97.348 | 1.00 | 55.38 | A | C |

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|------|-----|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 203 | O | ARG | A | 151 | 265.503 | -51.247 | 97.625 | 1.00 | 60.78 | A | O |
| ATOM | 204 | N | GLU | A | 152 | 263.826 | -51.059 | 96.105 | 1.00 | 54.28 | A | N |
| ATOM | 205 | CA | GLU | A | 152 | 264.664 | -51.366 | 94.972 | 1.00 | 54.46 | A | C |
| ATOM | 206 | CB | GLU | A | 152 | 263.811 | -51.817 | 93.823 | 1.00 | 60.23 | A | C |
| ATOM | 207 | CG | GLU | A | 152 | 264.520 | -52.780 | 92.888 | 1.00 | 67.69 | A | C |
| ATOM | 208 | CD | GLU | A | 152 | 265.617 | -52.120 | 92.087 | 1.00 | 75.21 | A | C |
| ATOM | 209 | OE1 | GLU | A | 152 | 266.773 | -52.020 | 92.593 | 1.00 | 78.70 | A | O |
| ATOM | 210 | OE2 | GLU | A | 152 | 265.305 | -51.689 | 90.951 | 1.00 | 76.28 | A | O |
| ATOM | 211 | C | GLU | A | 152 | 265.436 | -50.117 | 94.598 | 1.00 | 54.18 | A | C |
| ATOM | 212 | O | GLU | A | 152 | 264.868 | -49.045 | 94.388 | 1.00 | 55.50 | A | O |
| ATOM | 213 | N | LYS | A | 153 | 266.746 | -50.275 | 94.489 | 1.00 | 55.96 | A | N |
| ATOM | 214 | CA | LYS | A | 153 | 267.583 | -49.115 | 94.231 | 1.00 | 57.21 | A | C |
| ATOM | 215 | CB | LYS | A | 153 | 269.059 | -49.471 | 94.257 | 1.00 | 56.21 | A | C |
| ATOM | 216 | CG | LYS | A | 153 | 269.661 | -49.042 | 95.586 | 1.00 | 49.03 | A | C |
| ATOM | 217 | CD | LYS | A | 153 | 270.821 | -49.929 | 95.975 | 1.00 | 56.59 | A | C |
| ATOM | 218 | CE | LYS | A | 153 | 271.022 | -49.981 | 97.450 | 1.00 | 62.23 | A | C |
| ATOM | 219 | NZ | LYS | A | 153 | 272.289 | -50.704 | 97.804 | 1.00 | 63.82 | A | N |
| ATOM | 220 | C | LYS | A | 153 | 267.300 | -48.233 | 93.056 | 1.00 | 60.69 | A | C |
| ATOM | 221 | O | LYS | A | 153 | 267.418 | -47.029 | 93.188 | 1.00 | 68.16 | A | O |
| ATOM | 222 | N | GLN | A | 154 | 266.890 | -48.704 | 91.909 | 1.00 | 60.83 | A | N |
| ATOM | 223 | CA | GLN | A | 154 | 266.722 | -47.630 | 90.954 | 1.00 | 60.63 | A | C |
| ATOM | 224 | CB | GLN | A | 154 | 267.313 | -48.015 | 89.612 | 1.00 | 65.34 | A | C |
| ATOM | 225 | CG | GLN | A | 154 | 268.585 | -48.908 | 89.762 | 1.00 | 73.31 | A | C |
| ATOM | 226 | CD | GLN | A | 154 | 268.842 | -49.643 | 88.514 | 1.00 | 76.62 | A | C |
| ATOM | 227 | OE1 | GLN | A | 154 | 268.751 | -49.059 | 87.368 | 1.00 | 77.22 | A | O |
| ATOM | 228 | NE2 | GLN | A | 154 | 269.150 | -50.963 | 88.658 | 1.00 | 79.75 | A | N |
| ATOM | 229 | C | GLN | A | 154 | 265.288 | -47.279 | 90.868 | 1.00 | 58.41 | A | C |
| ATOM | 230 | O | GLN | A | 154 | 264.929 | -46.135 | 90.760 | 1.00 | 66.80 | A | O |
| ATOM | 231 | N | SER | A | 155 | 264.465 | -48.297 | 91.026 | 1.00 | 63.11 | A | N |
| ATOM | 232 | CA | SER | A | 155 | 263.012 | -48.182 | 90.986 | 1.00 | 57.08 | A | C |
| ATOM | 233 | CB | SER | A | 155 | 262.438 | -49.593 | 90.891 | 1.00 | 57.59 | A | C |
| ATOM | 234 | OG | SER | A | 155 | 261.096 | -49.532 | 90.511 | 1.00 | 71.09 | A | O |
| ATOM | 235 | C | SER | A | 155 | 262.393 | -47.454 | 92.192 | 1.00 | 54.17 | A | C |
| ATOM | 236 | O | SER | A | 155 | 261.494 | -46.653 | 92.054 | 1.00 | 41.48 | A | O |
| ATOM | 237 | N | LYS | A | 156 | 262.919 | -47.739 | 93.368 | 1.00 | 54.36 | A | N |
| ATOM | 238 | CA | LYS | A | 156 | 262.415 | -47.187 | 94.614 | 1.00 | 65.54 | A | C |
| ATOM | 239 | CB | LYS | A | 156 | 262.133 | -45.687 | 94.476 | 1.00 | 68.88 | A | C |
| ATOM | 240 | CG | LYS | A | 156 | 263.375 | -44.809 | 94.527 | 1.00 | 68.98 | A | C |
| ATOM | 241 | CD | LYS | A | 156 | 263.018 | -43.342 | 94.698 | 1.00 | 65.67 | A | C |
| ATOM | 242 | CE | LYS | A | 156 | 262.170 | -42.850 | 93.529 | 1.00 | 62.20 | A | C |
| ATOM | 243 | NZ | LYS | A | 156 | 261.774 | -41.416 | 93.679 | 1.00 | 56.13 | A | N |
| ATOM | 244 | C | LYS | A | 156 | 261.138 | -47.958 | 95.009 | 1.00 | 64.77 | A | C |
| ATOM | 245 | O | LYS | A | 156 | 260.317 | -47.485 | 95.803 | 1.00 | 68.30 | A | O |
| ATOM | 246 | N | PHE | A | 157 | 261.012 | -49.159 | 94.446 | 1.00 | 62.48 | A | N |
| ATOM | 247 | CA | PHE | A | 157 | 259.891 | -50.051 | 94.679 | 1.00 | 52.64 | A | C |
| ATOM | 248 | CB | PHE | A | 157 | 259.878 | -51.110 | 93.580 | 1.00 | 54.51 | A | C |
| ATOM | 249 | CG | PHE | A | 157 | 258.621 | -51.933 | 93.525 | 1.00 | 52.32 | A | C |
| ATOM | 250 | CD1 | PHE | A | 157 | 257.665 | -51.694 | 92.549 | 1.00 | 54.81 | A | C |
| ATOM | 251 | CD2 | PHE | A | 157 | 258.395 | -52.950 | 94.448 | 1.00 | 55.89 | A | C |
| ATOM | 252 | CE1 | PHE | A | 157 | 256.499 | -52.451 | 92.487 | 1.00 | 53.63 | A | C |
| ATOM | 253 | CE2 | PHE | A | 157 | 257.232 | -53.719 | 94.401 | 1.00 | 54.27 | A | C |
| ATOM | 254 | CZ | PHE | A | 157 | 256.286 | -53.467 | 93.419 | 1.00 | 58.00 | A | C |
| ATOM | 255 | C | PHE | A | 157 | 260.015 | -50.719 | 96.056 | 1.00 | 51.79 | A | C |
| ATOM | 256 | O | PHE | A | 157 | 261.020 | -51.370 | 96.340 | 1.00 | 47.35 | A | O |
| ATOM | 257 | N | ILE | A | 158 | 258.996 | -50.539 | 96.900 | 1.00 | 50.33 | A | N |
| ATOM | 258 | CA | ILE | A | 158 | 258.997 | -51.137 | 98.212 | 1.00 | 48.14 | A | C |
| ATOM | 259 | CB | ILE | A | 158 | 258.329 | -50.196 | 99.284 | 1.00 | 48.26 | A | C |
| ATOM | 260 | CG2 | ILE | A | 158 | 257.863 | -50.988 | 100.478 | 1.00 | 42.57 | A | C |
| ATOM | 261 | CG1 | ILE | A | 158 | 259.382 | -49.205 | 99.795 | 1.00 | 48.74 | A | C |
| ATOM | 262 | CD1 | ILE | A | 158 | 258.914 | -48.326 | 100.849 | 1.00 | 60.25 | A | C |
| ATOM | 263 | C | ILE | A | 158 | 258.354 | -52.530 | 98.176 | 1.00 | 52.33 | A | C |
| ATOM | 264 | O | ILE | A | 158 | 257.269 | -52.732 | 97.635 | 1.00 | 50.55 | A | O |
| ATOM | 265 | N | LEU | A | 159 | 259.034 | -53.472 | 98.823 | 1.00 | 52.37 | A | N |
| ATOM | 266 | CA | LEU | A | 159 | 258.631 | -54.858 | 98.835 | 1.00 | 48.01 | A | C |
| ATOM | 267 | CB | LEU | A | 159 | 259.322 | -55.530 | 97.663 | 1.00 | 49.17 | A | C |
| ATOM | 268 | CG | LEU | A | 159 | 260.759 | -55.019 | 97.480 | 1.00 | 47.74 | A | C |
| ATOM | 269 | CD1 | LEU | A | 159 | 261.690 | -55.880 | 98.307 | 1.00 | 46.92 | A | C |
| ATOM | 270 | CD2 | LEU | A | 159 | 261.150 | -55.055 | 96.008 | 1.00 | 47.94 | A | C |
| ATOM | 271 | C | LEU | A | 159 | 259.089 | -55.468 | 100.111 | 1.00 | 44.03 | A | C |
| ATOM | 272 | O | LEU | A | 159 | 259.595 | -54.777 | 100.931 | 1.00 | 48.23 | A | O |

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|------|-----|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 273 | N | ALA | A | 160 | 258.889 | -56.765 | 100.280 | 1.00 | 43.85 | A | N |
| ATOM | 274 | CA | ALA | A | 160 | 259.347 | -57.465 | 101.474 | 1.00 | 37.28 | A | C |
| ATOM | 275 | CB | ALA | A | 160 | 258.187 | -58.117 | 102.184 | 1.00 | 41.03 | A | C |
| ATOM | 276 | C | ALA | A | 160 | 260.346 | -58.531 | 101.030 | 1.00 | 43.40 | A | C |
| ATOM | 277 | O | ALA | A | 160 | 260.084 | -59.301 | 100.096 | 1.00 | 40.92 | A | O |
| ATOM | 278 | N | LEU | A | 161 | 261.494 | -58.566 | 101.693 | 1.00 | 46.08 | A | N |
| ATOM | 279 | CA | LEU | A | 161 | 262.564 | -59.520 | 101.378 | 1.00 | 44.64 | A | C |
| ATOM | 280 | CB | LEU | A | 161 | 263.916 | -58.794 | 101.334 | 1.00 | 47.23 | A | C |
| ATOM | 281 | CG | LEU | A | 161 | 264.865 | -59.050 | 100.188 | 1.00 | 47.49 | A | C |
| ATOM | 282 | CD1 | LEU | A | 161 | 264.153 | -58.846 | 98.870 | 1.00 | 42.04 | A | C |
| ATOM | 283 | CD2 | LEU | A | 161 | 266.031 | -58.125 | 100.309 | 1.00 | 46.85 | A | C |
| ATOM | 284 | C | LEU | A | 161 | 262.607 | -60.592 | 102.441 | 1.00 | 45.60 | A | C |
| ATOM | 285 | O | LEU | A | 161 | 263.013 | -60.338 | 103.570 | 1.00 | 56.35 | A | O |
| ATOM | 286 | N | LYS | A | 162 | 262.194 | -61.801 | 102.078 | 1.00 | 46.81 | A | N |
| ATOM | 287 | CA | LYS | A | 162 | 262.178 | -62.940 | 103.009 | 1.00 | 41.78 | A | C |
| ATOM | 288 | CB | LYS | A | 162 | 261.104 | -63.922 | 102.585 | 1.00 | 37.22 | A | C |
| ATOM | 289 | CG | LYS | A | 162 | 260.826 | -65.007 | 103.588 | 1.00 | 34.96 | A | C |
| ATOM | 290 | CD | LYS | A | 162 | 259.600 | -65.804 | 103.219 | 1.00 | 30.75 | A | C |
| ATOM | 291 | CE | LYS | A | 162 | 259.522 | -67.056 | 104.081 | 1.00 | 32.45 | A | C |
| ATOM | 292 | NZ | LYS | A | 162 | 258.194 | -67.801 | 103.796 | 1.00 | 32.97 | A | N |
| ATOM | 293 | C | LYS | A | 162 | 263.521 | -63.634 | 103.018 | 1.00 | 43.17 | A | C |
| ATOM | 294 | O | LYS | A | 162 | 263.869 | -64.350 | 102.087 | 1.00 | 50.65 | A | O |
| ATOM | 295 | N | VAL | A | 163 | 264.299 | -63.369 | 104.049 | 1.00 | 47.41 | A | N |
| ATOM | 296 | CA | VAL | A | 163 | 265.625 | -63.965 | 104.187 | 1.00 | 50.56 | A | C |
| ATOM | 297 | CB | VAL | A | 163 | 266.539 | -63.091 | 105.120 | 1.00 | 49.49 | A | C |
| ATOM | 298 | CG1 | VAL | A | 163 | 267.951 | -63.664 | 105.180 | 1.00 | 43.15 | A | C |
| ATOM | 299 | CG2 | VAL | A | 163 | 266.555 | -61.660 | 104.586 | 1.00 | 46.95 | A | C |
| ATOM | 300 | C | VAL | A | 163 | 265.570 | -65.371 | 104.756 | 1.00 | 48.41 | A | C |
| ATOM | 301 | O | VAL | A | 163 | 264.994 | -65.586 | 105.798 | 1.00 | 53.08 | A | O |
| ATOM | 302 | N | LEU | A | 164 | 266.195 | -66.329 | 104.085 | 1.00 | 53.99 | A | N |
| ATOM | 303 | CA | LEU | A | 164 | 266.261 | -67.732 | 104.569 | 1.00 | 55.36 | A | C |
| ATOM | 304 | CB | LEU | A | 164 | 265.516 | -68.657 | 103.598 | 1.00 | 54.99 | A | C |
| ATOM | 305 | CG | LEU | A | 164 | 264.173 | -68.154 | 103.039 | 1.00 | 57.06 | A | C |
| ATOM | 306 | CD1 | LEU | A | 164 | 264.096 | -68.423 | 101.535 | 1.00 | 57.49 | A | C |
| ATOM | 307 | CD2 | LEU | A | 164 | 263.093 | -68.851 | 103.764 | 1.00 | 55.47 | A | C |
| ATOM | 308 | C | LEU | A | 164 | 267.715 | -68.188 | 104.665 | 1.00 | 52.23 | A | C |
| ATOM | 309 | O | LEU | A | 164 | 268.488 | -67.990 | 103.745 | 1.00 | 50.98 | A | O |
| ATOM | 310 | N | PHE | A | 165 | 268.081 | -68.800 | 105.774 | 1.00 | 52.15 | A | N |
| ATOM | 311 | CA | PHE | A | 165 | 269.422 | -69.297 | 105.892 | 1.00 | 51.87 | A | C |
| ATOM | 312 | CB | PHE | A | 165 | 269.859 | -69.322 | 107.352 | 1.00 | 54.79 | A | C |
| ATOM | 313 | CG | PHE | A | 165 | 270.210 | -67.979 | 107.875 | 1.00 | 59.43 | A | C |
| ATOM | 314 | CD1 | PHE | A | 165 | 269.232 | -67.171 | 108.426 | 1.00 | 61.03 | A | C |
| ATOM | 315 | CD2 | PHE | A | 165 | 271.517 | -67.493 | 107.769 | 1.00 | 59.15 | A | C |
| ATOM | 316 | CE1 | PHE | A | 165 | 269.542 | -65.896 | 108.856 | 1.00 | 59.31 | A | C |
| ATOM | 317 | CE2 | PHE | A | 165 | 271.835 | -66.216 | 108.196 | 1.00 | 59.42 | A | C |
| ATOM | 318 | CZ | PHE | A | 165 | 270.845 | -65.412 | 108.745 | 1.00 | 60.41 | A | C |
| ATOM | 319 | C | PHE | A | 165 | 269.598 | -70.683 | 105.287 | 1.00 | 52.40 | A | C |
| ATOM | 320 | O | PHE | A | 165 | 268.924 | -71.654 | 105.675 | 1.00 | 45.64 | A | O |
| ATOM | 321 | N | LYS | A | 166 | 270.504 | -70.772 | 104.320 | 1.00 | 52.32 | A | N |
| ATOM | 322 | CA | LYS | A | 166 | 270.786 | -72.050 | 103.696 | 1.00 | 53.94 | A | C |
| ATOM | 323 | CB | LYS | A | 166 | 271.911 | -71.916 | 102.708 | 1.00 | 47.98 | A | C |
| ATOM | 324 | CG | LYS | A | 166 | 271.540 | -71.081 | 101.498 | 1.00 | 41.92 | A | C |
| ATOM | 325 | CD | LYS | A | 166 | 272.530 | -71.309 | 100.383 | 1.00 | 38.85 | A | C |
| ATOM | 326 | CE | LYS | A | 166 | 272.490 | -70.201 | 99.345 | 1.00 | 31.90 | A | C |
| ATOM | 327 | NZ | LYS | A | 166 | 273.477 | -70.401 | 98.252 | 1.00 | 43.47 | A | N |
| ATOM | 328 | C | LYS | A | 166 | 271.159 | -73.067 | 104.740 | 1.00 | 51.94 | A | C |
| ATOM | 329 | O | LYS | A | 166 | 270.625 | -74.147 | 104.743 | 1.00 | 62.20 | A | O |
| ATOM | 330 | N | ALA | A | 167 | 272.031 | -72.699 | 105.659 | 1.00 | 51.64 | A | N |
| ATOM | 331 | CA | ALA | A | 167 | 272.445 | -73.632 | 106.682 | 1.00 | 51.81 | A | C |
| ATOM | 332 | CB | ALA | A | 167 | 273.293 | -72.935 | 107.670 | 1.00 | 53.31 | A | C |
| ATOM | 333 | C | ALA | A | 167 | 271.234 | -74.240 | 107.369 | 1.00 | 53.85 | A | C |
| ATOM | 334 | O | ALA | A | 167 | 271.105 | -75.457 | 107.454 | 1.00 | 57.18 | A | O |
| ATOM | 335 | N | GLN | A | 168 | 270.318 | -73.403 | 107.833 | 1.00 | 59.28 | A | N |
| ATOM | 336 | CA | GLN | A | 168 | 269.139 | -73.902 | 108.534 | 1.00 | 59.95 | A | C |
| ATOM | 337 | CB | GLN | A | 168 | 268.348 | -72.736 | 109.131 | 1.00 | 66.12 | A | C |
| ATOM | 338 | CG | GLN | A | 168 | 268.398 | -72.648 | 110.644 | 1.00 | 72.61 | A | C |
| ATOM | 339 | CD | GLN | A | 168 | 267.038 | -72.270 | 111.248 | 1.00 | 77.64 | A | C |
| ATOM | 340 | OE1 | GLN | A | 168 | 266.542 | -72.938 | 112.173 | 1.00 | 76.82 | A | O |
| ATOM | 341 | NE2 | GLN | A | 168 | 266.432 | -71.196 | 110.727 | 1.00 | 72.17 | A | N |
| ATOM | 342 | C | GLN | A | 168 | 268.221 | -74.718 | 107.635 | 1.00 | 55.73 | A | C |

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|------|-----|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 343 | O | GLN | A | 168 | 267.646 | -75.736 | 108.043 | 1.00 | 53.22 | A | O |
| ATOM | 344 | N | LEU | A | 169 | 268.076 | -74.262 | 106.404 | 1.00 | 47.44 | A | N |
| ATOM | 345 | CA | LEU | A | 169 | 267.214 | -74.954 | 105.430 | 1.00 | 53.18 | A | C |
| ATOM | 346 | CB | LEU | A | 169 | 267.236 | -74.247 | 104.084 | 1.00 | 46.05 | A | C |
| ATOM | 347 | CG | LEU | A | 169 | 266.495 | -72.939 | 104.055 | 1.00 | 47.35 | A | C |
| ATOM | 348 | CD1 | LEU | A | 169 | 266.858 | -72.184 | 102.803 | 1.00 | 45.64 | A | C |
| ATOM | 349 | CD2 | LEU | A | 169 | 265.005 | -73.224 | 104.130 | 1.00 | 44.94 | A | C |
| ATOM | 350 | C | LEU | A | 169 | 267.743 | -76.381 | 105.180 | 1.00 | 53.79 | A | C |
| ATOM | 351 | O | LEU | A | 169 | 266.983 | -77.361 | 105.065 | 1.00 | 54.87 | A | O |
| ATOM | 352 | N | GLU | A | 170 | 269.057 | -76.488 | 105.056 | 1.00 | 54.40 | A | N |
| ATOM | 353 | CA | GLU | A | 170 | 269.692 | -77.771 | 104.839 | 1.00 | 58.30 | A | C |
| ATOM | 354 | CB | GLU | A | 170 | 271.162 | -77.587 | 104.678 | 1.00 | 57.36 | A | C |
| ATOM | 355 | CG | GLU | A | 170 | 271.585 | -77.158 | 103.319 | 1.00 | 66.04 | A | C |
| ATOM | 356 | CD | GLU | A | 170 | 273.099 | -76.836 | 103.260 | 1.00 | 73.19 | A | C |
| ATOM | 357 | OE1 | GLU | A | 170 | 273.912 | -77.755 | 103.560 | 1.00 | 76.86 | A | O |
| ATOM | 358 | OE2 | GLU | A | 170 | 273.473 | -75.670 | 102.918 | 1.00 | 77.40 | A | O |
| ATOM | 359 | C | GLU | A | 170 | 269.481 | -78.643 | 106.045 | 1.00 | 60.58 | A | C |
| ATOM | 360 | O | GLU | A | 170 | 268.882 | -79.730 | 105.913 | 1.00 | 71.27 | A | O |
| ATOM | 361 | N | LYS | A | 171 | 269.931 | -78.162 | 107.207 | 1.00 | 59.38 | A | N |
| ATOM | 362 | CA | LYS | A | 171 | 269.817 | -78.942 | 108.423 | 1.00 | 59.74 | A | C |
| ATOM | 363 | CB | LYS | A | 171 | 270.264 | -78.118 | 109.600 | 1.00 | 58.50 | A | C |
| ATOM | 364 | C | LYS | A | 171 | 268.409 | -79.500 | 108.655 | 1.00 | 62.87 | A | C |
| ATOM | 365 | O | LYS | A | 171 | 268.227 | -80.438 | 109.441 | 1.00 | 65.46 | A | O |
| ATOM | 366 | N | ALA | A | 172 | 267.417 | -78.939 | 107.970 | 1.00 | 58.04 | A | N |
| ATOM | 367 | CA | ALA | A | 172 | 266.044 | -79.373 | 108.153 | 1.00 | 55.58 | A | C |
| ATOM | 368 | CB | ALA | A | 172 | 265.139 | -78.157 | 108.445 | 1.00 | 44.25 | A | C |
| ATOM | 369 | C | ALA | A | 172 | 265.506 | -80.129 | 106.962 | 1.00 | 57.83 | A | C |
| ATOM | 370 | O | ALA | A | 172 | 264.406 | -80.699 | 107.038 | 1.00 | 63.97 | A | O |
| ATOM | 371 | N | GLY | A | 173 | 266.255 | -80.108 | 105.860 | 1.00 | 59.05 | A | N |
| ATOM | 372 | CA | GLY | A | 173 | 265.825 | -80.806 | 104.659 | 1.00 | 58.57 | A | C |
| ATOM | 373 | C | GLY | A | 173 | 264.519 | -80.290 | 104.096 | 1.00 | 56.33 | A | C |
| ATOM | 374 | O | GLY | A | 173 | 263.636 | -81.045 | 103.722 | 1.00 | 57.22 | A | O |
| ATOM | 375 | N | VAL | A | 174 | 264.392 | -78.983 | 104.043 | 1.00 | 52.27 | A | N |
| ATOM | 376 | CA | VAL | A | 174 | 263.183 | -78.389 | 103.520 | 1.00 | 51.67 | A | C |
| ATOM | 377 | CB | VAL | A | 174 | 262.555 | -77.420 | 104.523 | 1.00 | 44.57 | A | C |
| ATOM | 378 | CG1 | VAL | A | 174 | 262.061 | -78.172 | 105.687 | 1.00 | 45.83 | A | C |
| ATOM | 379 | CG2 | VAL | A | 174 | 263.557 | -76.374 | 104.919 | 1.00 | 43.22 | A | C |
| ATOM | 380 | C | VAL | A | 174 | 263.518 | -77.628 | 102.230 | 1.00 | 55.27 | A | C |
| ATOM | 381 | O | VAL | A | 174 | 262.825 | -76.679 | 101.851 | 1.00 | 62.81 | A | O |
| ATOM | 382 | N | GLU | A | 175 | 264.577 | -78.044 | 101.548 | 1.00 | 50.98 | A | N |
| ATOM | 383 | CA | GLU | A | 175 | 264.955 | -77.393 | 100.296 | 1.00 | 52.00 | A | C |
| ATOM | 384 | CB | GLU | A | 175 | 266.251 | -77.994 | 99.721 | 1.00 | 47.79 | A | C |
| ATOM | 385 | CG | GLU | A | 175 | 267.462 | -77.861 | 100.680 | 1.00 | 59.64 | A | C |
| ATOM | 386 | CD | GLU | A | 175 | 267.730 | -79.101 | 101.479 | 1.00 | 59.83 | A | C |
| ATOM | 387 | OE1 | GLU | A | 175 | 266.822 | -79.948 | 101.619 | 1.00 | 66.12 | A | O |
| ATOM | 388 | OE2 | GLU | A | 175 | 268.853 | -79.219 | 101.990 | 1.00 | 70.43 | A | O |
| ATOM | 389 | C | GLU | A | 175 | 263.852 | -77.526 | 99.266 | 1.00 | 51.17 | A | C |
| ATOM | 390 | O | GLU | A | 175 | 263.637 | -76.642 | 98.463 | 1.00 | 57.75 | A | O |
| ATOM | 391 | N | HIS | A | 176 | 263.166 | -78.661 | 99.266 | 1.00 | 60.20 | A | N |
| ATOM | 392 | CA | HIS | A | 176 | 262.080 | -78.920 | 98.312 | 1.00 | 61.34 | A | C |
| ATOM | 393 | CB | HIS | A | 176 | 261.735 | -80.414 | 98.276 | 1.00 | 62.47 | A | C |
| ATOM | 394 | CG | HIS | A | 176 | 261.265 | -80.959 | 99.579 | 1.00 | 70.92 | A | C |
| ATOM | 395 | CD2 | HIS | A | 176 | 261.875 | -81.020 | 100.783 | 1.00 | 68.70 | A | C |
| ATOM | 396 | ND1 | HIS | A | 176 | 260.020 | -81.533 | 99.740 | 1.00 | 72.07 | A | N |
| ATOM | 397 | CE1 | HIS | A | 176 | 259.886 | -81.925 | 100.994 | 1.00 | 75.43 | A | C |
| ATOM | 398 | NE2 | HIS | A | 176 | 260.996 | -81.625 | 101.644 | 1.00 | 77.22 | A | N |
| ATOM | 399 | C | HIS | A | 176 | 260.828 | -78.116 | 98.620 | 1.00 | 60.76 | A | C |
| ATOM | 400 | O | HIS | A | 176 | 260.058 | -77.805 | 97.733 | 1.00 | 64.86 | A | O |
| ATOM | 401 | N | GLN | A | 177 | 260.607 | -77.784 | 99.886 | 1.00 | 63.60 | A | N |
| ATOM | 402 | CA | GLN | A | 177 | 259.436 | -76.993 | 100.239 | 1.00 | 59.32 | A | C |
| ATOM | 403 | CB | GLN | A | 177 | 259.188 | -77.080 | 101.756 | 1.00 | 65.79 | A | C |
| ATOM | 404 | CG | GLN | A | 177 | 258.573 | -78.484 | 102.090 | 1.00 | 78.25 | A | C |
| ATOM | 405 | CD | GLN | A | 177 | 258.481 | -78.896 | 103.539 | 1.00 | 84.93 | A | C |
| ATOM | 406 | OE1 | GLN | A | 177 | 257.670 | -79.822 | 103.897 | 1.00 | 89.62 | A | O |
| ATOM | 407 | NE2 | GLN | A | 177 | 259.316 | -78.274 | 104.407 | 1.00 | 87.76 | A | N |
| ATOM | 408 | C | GLN | A | 177 | 259.647 | -75.552 | 99.730 | 1.00 | 54.25 | A | C |
| ATOM | 409 | O | GLN | A | 177 | 258.739 | -75.013 | 99.073 | 1.00 | 51.39 | A | O |
| ATOM | 410 | N | LEU | A | 178 | 260.844 | -74.972 | 99.942 | 1.00 | 45.84 | A | N |
| ATOM | 411 | CA | LEU | A | 178 | 261.123 | -73.611 | 99.474 | 1.00 | 49.49 | A | C |
| ATOM | 412 | CB | LEU | A | 178 | 262.514 | -73.175 | 99.900 | 1.00 | 42.21 | A | C |

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|------|-----|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 413 | CG | LEU | A | 178 | 263.032 | -71.858 | 99.325 | 1.00 | 49.26 | A | C |
| ATOM | 414 | CD1 | LEU | A | 178 | 261.981 | -70.693 | 99.584 | 1.00 | 37.20 | A | C |
| ATOM | 415 | CD2 | LEU | A | 178 | 264.421 | -71.557 | 99.950 | 1.00 | 46.43 | A | C |
| ATOM | 416 | C | LEU | A | 178 | 261.030 | -73.631 | 97.939 | 1.00 | 46.87 | A | C |
| ATOM | 417 | O | LEU | A | 178 | 260.678 | -72.659 | 97.280 | 1.00 | 52.87 | A | O |
| ATOM | 418 | N | ARG | A | 179 | 261.314 | -74.778 | 97.360 | 1.00 | 52.38 | A | N |
| ATOM | 419 | CA | ARG | A | 179 | 261.258 | -74.887 | 95.908 | 1.00 | 48.78 | A | C |
| ATOM | 420 | CB | ARG | A | 179 | 261.877 | -76.207 | 95.443 | 1.00 | 55.74 | A | C |
| ATOM | 421 | CG | ARG | A | 179 | 262.661 | -76.085 | 94.149 | 1.00 | 55.19 | A | C |
| ATOM | 422 | CD | ARG | A | 179 | 263.898 | -77.002 | 94.178 | 1.00 | 71.41 | A | C |
| ATOM | 423 | NE | ARG | A | 179 | 264.829 | -76.685 | 93.086 | 1.00 | 73.48 | A | N |
| ATOM | 424 | CZ | ARG | A | 179 | 264.827 | -77.258 | 91.873 | 1.00 | 77.16 | A | C |
| ATOM | 425 | NH1 | ARG | A | 179 | 263.941 | -78.208 | 91.565 | 1.00 | 70.26 | A | N |
| ATOM | 426 | NH2 | ARG | A | 179 | 265.709 | -76.874 | 90.951 | 1.00 | 75.62 | A | N |
| ATOM | 427 | C | ARG | A | 179 | 259.841 | -74.758 | 95.383 | 1.00 | 46.80 | A | C |
| ATOM | 428 | O | ARG | A | 179 | 259.605 | -74.009 | 94.443 | 1.00 | 37.96 | A | O |
| ATOM | 429 | N | ARG | A | 180 | 258.912 | -75.494 | 95.988 | 1.00 | 41.56 | A | N |
| ATOM | 430 | CA | ARG | A | 180 | 257.504 | -75.451 | 95.630 | 1.00 | 46.45 | A | C |
| ATOM | 431 | CB | ARG | A | 180 | 256.749 | -76.543 | 96.386 | 1.00 | 47.01 | A | C |
| ATOM | 432 | CG | ARG | A | 180 | 256.416 | -77.762 | 95.546 | 1.00 | 51.52 | A | C |
| ATOM | 433 | CD | ARG | A | 180 | 255.582 | -78.783 | 96.257 | 1.00 | 53.97 | A | C |
| ATOM | 434 | NE | ARG | A | 180 | 256.374 | -79.863 | 96.824 | 1.00 | 69.57 | A | N |
| ATOM | 435 | CZ | ARG | A | 180 | 256.902 | -79.849 | 98.046 | 1.00 | 76.20 | A | C |
| ATOM | 436 | NH1 | ARG | A | 180 | 256.721 | -78.796 | 98.846 | 1.00 | 85.82 | A | N |
| ATOM | 437 | NH2 | ARG | A | 180 | 257.614 | -80.893 | 98.475 | 1.00 | 82.98 | A | N |
| ATOM | 438 | C | ARG | A | 180 | 256.882 | -74.100 | 95.969 | 1.00 | 48.19 | A | C |
| ATOM | 439 | O | ARG | A | 180 | 256.088 | -73.556 | 95.189 | 1.00 | 55.26 | A | O |
| ATOM | 440 | N | GLU | A | 181 | 257.235 | -73.560 | 97.130 | 1.00 | 49.77 | A | N |
| ATOM | 441 | CA | GLU | A | 181 | 256.694 | -72.279 | 97.536 | 1.00 | 48.24 | A | C |
| ATOM | 442 | CB | GLU | A | 181 | 257.367 | -71.820 | 98.841 | 1.00 | 51.28 | A | C |
| ATOM | 443 | CG | GLU | A | 181 | 256.969 | -70.425 | 99.303 | 1.00 | 55.39 | A | C |
| ATOM | 444 | CD | GLU | A | 181 | 257.553 | -70.042 | 100.652 | 1.00 | 57.20 | A | C |
| ATOM | 445 | OE1 | GLU | A | 181 | 258.173 | -70.904 | 101.305 | 1.00 | 46.80 | A | O |
| ATOM | 446 | OE2 | GLU | A | 181 | 257.362 | -68.871 | 101.058 | 1.00 | 56.40 | A | O |
| ATOM | 447 | C | GLU | A | 181 | 256.958 | -71.259 | 96.430 | 1.00 | 49.63 | A | C |
| ATOM | 448 | O | GLU | A | 181 | 256.044 | -70.571 | 95.930 | 1.00 | 44.79 | A | O |
| ATOM | 449 | N | VAL | A | 182 | 258.227 | -71.191 | 96.037 | 1.00 | 46.11 | A | N |
| ATOM | 450 | CA | VAL | A | 182 | 258.659 | -70.228 | 95.035 | 1.00 | 45.55 | A | C |
| ATOM | 451 | CB | VAL | A | 182 | 260.183 | -70.266 | 94.833 | 1.00 | 40.91 | A | C |
| ATOM | 452 | CG1 | VAL | A | 182 | 260.560 | -69.403 | 93.678 | 1.00 | 38.12 | A | C |
| ATOM | 453 | CG2 | VAL | A | 182 | 260.875 | -69.730 | 96.059 | 1.00 | 51.08 | A | C |
| ATOM | 454 | C | VAL | A | 182 | 257.954 | -70.443 | 93.695 | 1.00 | 46.82 | A | C |
| ATOM | 455 | O | VAL | A | 182 | 257.459 | -69.483 | 93.056 | 1.00 | 40.29 | A | O |
| ATOM | 456 | N | GLU | A | 183 | 257.936 | -71.690 | 93.237 | 1.00 | 48.08 | A | N |
| ATOM | 457 | CA | GLU | A | 183 | 257.280 | -72.012 | 91.968 | 1.00 | 52.62 | A | C |
| ATOM | 458 | CB | GLU | A | 183 | 257.493 | -73.478 | 91.608 | 1.00 | 56.60 | A | C |
| ATOM | 459 | CG | GLU | A | 183 | 258.695 | -73.784 | 90.808 | 1.00 | 70.69 | A | C |
| ATOM | 460 | CD | GLU | A | 183 | 258.923 | -75.283 | 90.746 | 1.00 | 77.34 | A | C |
| ATOM | 461 | OE1 | GLU | A | 183 | 257.954 | -76.011 | 90.397 | 1.00 | 83.76 | A | O |
| ATOM | 462 | OE2 | GLU | A | 183 | 260.068 | -75.727 | 91.052 | 1.00 | 82.45 | A | O |
| ATOM | 463 | C | GLU | A | 183 | 255.800 | -71.754 | 91.912 | 1.00 | 49.85 | A | C |
| ATOM | 464 | O | GLU | A | 183 | 255.313 | -71.138 | 90.947 | 1.00 | 46.36 | A | O |
| ATOM | 465 | N | ILE | A | 184 | 255.098 | -72.317 | 92.898 | 1.00 | 46.74 | A | N |
| ATOM | 466 | CA | ILE | A | 184 | 253.660 | -72.157 | 92.965 | 1.00 | 43.86 | A | C |
| ATOM | 467 | CB | ILE | A | 184 | 253.067 | -72.962 | 94.115 | 1.00 | 40.26 | A | C |
| ATOM | 468 | CG2 | ILE | A | 184 | 251.553 | -72.714 | 94.209 | 1.00 | 29.84 | A | C |
| ATOM | 469 | CG1 | ILE | A | 184 | 253.313 | -74.446 | 93.860 | 1.00 | 36.80 | A | C |
| ATOM | 470 | CD1 | ILE | A | 184 | 252.748 | -75.369 | 94.961 | 1.00 | 40.80 | A | C |
| ATOM | 471 | C | ILE | A | 184 | 253.221 | -70.713 | 93.099 | 1.00 | 46.29 | A | C |
| ATOM | 472 | O | ILE | A | 184 | 252.448 | -70.199 | 92.284 | 1.00 | 49.47 | A | O |
| ATOM | 473 | N | GLN | A | 185 | 253.720 | -70.054 | 94.132 | 1.00 | 49.23 | A | N |
| ATOM | 474 | CA | GLN | A | 185 | 253.328 | -68.666 | 94.388 | 1.00 | 52.47 | A | C |
| ATOM | 475 | CB | GLN | A | 185 | 253.948 | -68.189 | 95.721 | 1.00 | 44.73 | A | C |
| ATOM | 476 | CG | GLN | A | 185 | 253.150 | -67.168 | 96.526 | 1.00 | 48.30 | A | C |
| ATOM | 477 | CD | GLN | A | 185 | 253.861 | -66.745 | 97.745 | 1.00 | 54.47 | A | C |
| ATOM | 478 | OE1 | GLN | A | 185 | 254.700 | -67.516 | 98.331 | 1.00 | 61.67 | A | O |
| ATOM | 479 | NE2 | GLN | A | 185 | 253.553 | -65.501 | 98.201 | 1.00 | 56.50 | A | N |
| ATOM | 480 | C | GLN | A | 185 | 253.707 | -67.716 | 93.231 | 1.00 | 50.63 | A | C |
| ATOM | 481 | O | GLN | A | 185 | 252.971 | -66.780 | 92.894 | 1.00 | 52.61 | A | O |
| ATOM | 482 | N | SER | A | 186 | 254.843 | -67.972 | 92.610 | 1.00 | 47.27 | A | N |

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|------|-----|-----|-----------|---------|---------|--------|------|-------|---|---|
| ATOM | 483 | CA | SER A 186 | 255.315 | -67.114 | 91.541 | 1.00 | 52.03 | A | C |
| ATOM | 484 | CB | SER A 186 | 256.692 | -67.586 | 91.048 | 1.00 | 51.09 | A | C |
| ATOM | 485 | OG | SER A 186 | 256.609 | -68.877 | 90.496 | 1.00 | 54.11 | A | O |
| ATOM | 486 | C | SER A 186 | 254.346 | -67.050 | 90.373 | 1.00 | 51.30 | A | C |
| ATOM | 487 | O | SER A 186 | 254.116 | -65.999 | 89.812 | 1.00 | 53.71 | A | O |
| ATOM | 488 | N | HIS A 187 | 253.774 | -68.184 | 90.001 | 1.00 | 55.86 | A | N |
| ATOM | 489 | CA | HIS A 187 | 252.846 | -68.233 | 88.883 | 1.00 | 57.28 | A | C |
| ATOM | 490 | CB | HIS A 187 | 252.945 | -69.605 | 88.190 | 1.00 | 68.44 | A | C |
| ATOM | 491 | CG | HIS A 187 | 254.283 | -69.866 | 87.541 | 1.00 | 77.26 | A | C |
| ATOM | 492 | CD2 | HIS A 187 | 255.147 | -69.041 | 86.892 | 1.00 | 78.77 | A | C |
| ATOM | 493 | ND1 | HIS A 187 | 254.874 | -71.114 | 87.532 | 1.00 | 80.45 | A | N |
| ATOM | 494 | CE1 | HIS A 187 | 256.041 | -71.048 | 86.911 | 1.00 | 81.91 | A | C |
| ATOM | 495 | NE2 | HIS A 187 | 256.232 | -69.802 | 86.512 | 1.00 | 81.51 | A | N |
| ATOM | 496 | C | HIS A 187 | 251.418 | -67.953 | 89.300 | 1.00 | 57.51 | A | C |
| ATOM | 497 | O | HIS A 187 | 250.496 | -68.154 | 88.529 | 1.00 | 60.26 | A | O |
| ATOM | 498 | N | LEU A 188 | 251.230 | -67.497 | 90.530 | 1.00 | 59.97 | A | N |
| ATOM | 499 | CA | LEU A 188 | 249.900 | -67.189 | 91.028 | 1.00 | 56.67 | A | C |
| ATOM | 500 | CB | LEU A 188 | 249.832 | -67.488 | 92.511 | 1.00 | 57.07 | A | C |
| ATOM | 501 | CG | LEU A 188 | 248.970 | -68.663 | 92.952 | 1.00 | 55.73 | A | C |
| ATOM | 502 | CD1 | LEU A 188 | 249.478 | -69.896 | 92.257 | 1.00 | 62.61 | A | C |
| ATOM | 503 | CD2 | LEU A 188 | 249.027 | -68.827 | 94.465 | 1.00 | 53.98 | A | C |
| ATOM | 504 | C | LEU A 188 | 249.598 | -65.728 | 90.777 | 1.00 | 57.85 | A | C |
| ATOM | 505 | O | LEU A 188 | 250.503 | -64.881 | 90.799 | 1.00 | 64.49 | A | O |
| ATOM | 506 | N | ARG A 189 | 248.331 | -65.440 | 90.507 | 1.00 | 59.25 | A | N |
| ATOM | 507 | CA | ARG A 189 | 247.893 | -64.067 | 90.239 | 1.00 | 63.66 | A | C |
| ATOM | 508 | CB | ARG A 189 | 247.927 | -63.796 | 88.734 | 1.00 | 64.78 | A | C |
| ATOM | 509 | CG | ARG A 189 | 249.318 | -63.660 | 88.125 | 1.00 | 70.33 | A | C |
| ATOM | 510 | CD | ARG A 189 | 249.903 | -62.285 | 88.356 | 1.00 | 72.14 | A | C |
| ATOM | 511 | NE | ARG A 189 | 250.864 | -61.937 | 87.301 | 1.00 | 81.14 | A | N |
| ATOM | 512 | CZ | ARG A 189 | 250.716 | -60.923 | 86.432 | 1.00 | 82.52 | A | C |
| ATOM | 513 | NH1 | ARG A 189 | 249.636 | -60.138 | 86.478 | 1.00 | 79.99 | A | N |
| ATOM | 514 | NH2 | ARG A 189 | 251.658 | -60.669 | 85.521 | 1.00 | 82.64 | A | N |
| ATOM | 515 | C | ARG A 189 | 246.469 | -63.844 | 90.761 | 1.00 | 59.43 | A | C |
| ATOM | 516 | O | ARG A 189 | 245.497 | -64.167 | 90.072 | 1.00 | 61.20 | A | O |
| ATOM | 517 | N | HIS A 190 | 246.342 | -63.283 | 91.964 | 1.00 | 56.49 | A | N |
| ATOM | 518 | CA | HIS A 190 | 245.023 | -63.075 | 92.565 | 1.00 | 48.34 | A | C |
| ATOM | 519 | CB | HIS A 190 | 244.506 | -64.377 | 93.201 | 1.00 | 52.70 | A | C |
| ATOM | 520 | CG | HIS A 190 | 243.036 | -64.372 | 93.489 | 1.00 | 49.06 | A | C |
| ATOM | 521 | CD2 | HIS A 190 | 242.038 | -65.207 | 93.107 | 1.00 | 52.53 | A | C |
| ATOM | 522 | ND1 | HIS A 190 | 242.449 | -63.432 | 94.302 | 1.00 | 51.06 | A | N |
| ATOM | 523 | CE1 | HIS A 190 | 241.155 | -63.686 | 94.414 | 1.00 | 46.17 | A | C |
| ATOM | 524 | NE2 | HIS A 190 | 240.878 | -64.757 | 93.697 | 1.00 | 43.53 | A | N |
| ATOM | 525 | C | HIS A 190 | 245.116 | -61.998 | 93.611 | 1.00 | 47.54 | A | C |
| ATOM | 526 | O | HIS A 190 | 246.077 | -61.946 | 94.377 | 1.00 | 44.41 | A | O |
| ATOM | 527 | N | PRO A 191 | 244.119 | -61.102 | 93.645 | 1.00 | 49.93 | A | N |
| ATOM | 528 | CD | PRO A 191 | 242.947 | -61.054 | 92.749 | 1.00 | 46.91 | A | C |
| ATOM | 529 | CA | PRO A 191 | 244.070 | -59.992 | 94.607 | 1.00 | 49.33 | A | C |
| ATOM | 530 | CB | PRO A 191 | 242.694 | -59.384 | 94.346 | 1.00 | 50.21 | A | C |
| ATOM | 531 | CG | PRO A 191 | 242.518 | -59.644 | 92.887 | 1.00 | 48.82 | A | C |
| ATOM | 532 | C | PRO A 191 | 244.239 | -60.419 | 96.072 | 1.00 | 46.55 | A | C |
| ATOM | 533 | O | PRO A 191 | 244.892 | -59.719 | 96.848 | 1.00 | 42.94 | A | O |
| ATOM | 534 | N | ASN A 192 | 243.647 | -61.555 | 96.434 | 1.00 | 42.75 | A | N |
| ATOM | 535 | CA | ASN A 192 | 243.715 | -62.060 | 97.791 | 1.00 | 48.46 | A | C |
| ATOM | 536 | CB | ASN A 192 | 242.378 | -62.678 | 98.192 | 1.00 | 45.61 | A | C |
| ATOM | 537 | CG | ASN A 192 | 241.206 | -61.781 | 97.847 | 1.00 | 48.26 | A | C |
| ATOM | 538 | OD1 | ASN A 192 | 240.715 | -61.767 | 96.724 | 1.00 | 55.77 | A | O |
| ATOM | 539 | ND2 | ASN A 192 | 240.766 | -61.020 | 98.804 | 1.00 | 48.89 | A | N |
| ATOM | 540 | C | ASN A 192 | 244.831 | -63.085 | 97.953 | 1.00 | 44.35 | A | C |
| ATOM | 541 | O | ASN A 192 | 244.725 | -64.017 | 98.747 | 1.00 | 54.33 | A | O |
| ATOM | 542 | N | ILE A 193 | 245.909 | -62.901 | 97.204 | 1.00 | 42.87 | A | N |
| ATOM | 543 | CA | ILE A 193 | 247.067 | -63.781 | 97.277 | 1.00 | 40.40 | A | C |
| ATOM | 544 | CB | ILE A 193 | 247.054 | -64.847 | 96.138 | 1.00 | 40.53 | A | C |
| ATOM | 545 | CG2 | ILE A 193 | 248.292 | -65.733 | 96.243 | 1.00 | 22.41 | A | C |
| ATOM | 546 | CG1 | ILE A 193 | 245.800 | -65.732 | 96.274 | 1.00 | 36.30 | A | C |
| ATOM | 547 | CD1 | ILE A 193 | 245.709 | -66.793 | 95.246 | 1.00 | 46.23 | A | C |
| ATOM | 548 | C | ILE A 193 | 248.330 | -62.944 | 97.180 | 1.00 | 43.53 | A | C |
| ATOM | 549 | O | ILE A 193 | 248.481 | -62.176 | 96.228 | 1.00 | 41.20 | A | O |
| ATOM | 550 | N | LEU A 194 | 249.217 | -63.070 | 98.171 | 1.00 | 46.32 | A | N |
| ATOM | 551 | CA | LEU A 194 | 250.449 | -62.307 | 98.168 | 1.00 | 48.93 | A | C |
| ATOM | 552 | CB | LEU A 194 | 251.233 | -62.511 | 99.477 | 1.00 | 44.51 | A | C |

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|------|-----|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 553 | CG | LEU | A | 194 | 252.485 | -61.630 | 99.579 | 1.00 | 41.08 | A | C |
| ATOM | 554 | CD1 | LEU | A | 194 | 252.055 | -60.195 | 99.956 | 1.00 | 43.64 | A | C |
| ATOM | 555 | CD2 | LEU | A | 194 | 253.437 | -62.183 | 100.655 | 1.00 | 41.05 | A | C |
| ATOM | 556 | C | LEU | A | 194 | 251.290 | -62.773 | 96.988 | 1.00 | 49.00 | A | C |
| ATOM | 557 | O | LEU | A | 194 | 251.553 | -63.975 | 96.826 | 1.00 | 53.77 | A | O |
| ATOM | 558 | N | ARG | A | 195 | 251.712 | -61.823 | 96.162 | 1.00 | 43.08 | A | N |
| ATOM | 559 | CA | ARG | A | 195 | 252.553 | -62.166 | 95.023 | 1.00 | 45.19 | A | C |
| ATOM | 560 | CB | ARG | A | 195 | 252.509 | -61.043 | 93.969 | 1.00 | 43.15 | A | C |
| ATOM | 561 | CG | ARG | A | 195 | 251.180 | -60.913 | 93.213 | 1.00 | 46.56 | A | C |
| ATOM | 562 | CD | ARG | A | 195 | 251.400 | -60.798 | 91.730 | 1.00 | 59.57 | A | C |
| ATOM | 563 | NE | ARG | A | 195 | 252.816 | -60.787 | 91.377 | 1.00 | 72.51 | A | N |
| ATOM | 564 | CZ | ARG | A | 195 | 253.288 | -60.716 | 90.133 | 1.00 | 78.66 | A | C |
| ATOM | 565 | NH1 | ARG | A | 195 | 252.446 | -60.646 | 89.119 | 1.00 | 80.03 | A | N |
| ATOM | 566 | NH2 | ARG | A | 195 | 254.603 | -60.723 | 89.898 | 1.00 | 82.29 | A | N |
| ATOM | 567 | C | ARG | A | 195 | 254.004 | -62.450 | 95.390 | 1.00 | 44.60 | A | C |
| ATOM | 568 | O | ARG | A | 195 | 254.470 | -62.001 | 96.429 | 1.00 | 47.11 | A | O |
| ATOM | 569 | N | LEU | A | 196 | 254.710 | -63.177 | 94.522 | 1.00 | 48.18 | A | N |
| ATOM | 570 | CA | LEU | A | 196 | 256.116 | -63.465 | 94.735 | 1.00 | 48.30 | A | C |
| ATOM | 571 | CB | LEU | A | 196 | 256.345 | -64.954 | 95.048 | 1.00 | 50.39 | A | C |
| ATOM | 572 | CG | LEU | A | 196 | 257.768 | -65.343 | 95.383 | 1.00 | 41.45 | A | C |
| ATOM | 573 | CD1 | LEU | A | 196 | 258.090 | -64.804 | 96.698 | 1.00 | 58.09 | A | C |
| ATOM | 574 | CD2 | LEU | A | 196 | 257.886 | -66.788 | 95.411 | 1.00 | 44.21 | A | C |
| ATOM | 575 | C | LEU | A | 196 | 256.799 | -63.091 | 93.432 | 1.00 | 50.04 | A | C |
| ATOM | 576 | O | LEU | A | 196 | 256.887 | -63.926 | 92.532 | 1.00 | 56.48 | A | O |
| ATOM | 577 | N | TYR | A | 197 | 257.301 | -61.854 | 93.359 | 1.00 | 52.17 | A | N |
| ATOM | 578 | CA | TYR | A | 197 | 257.970 | -61.330 | 92.172 | 1.00 | 49.64 | A | C |
| ATOM | 579 | CB | TYR | A | 197 | 258.419 | -59.908 | 92.460 | 1.00 | 44.72 | A | C |
| ATOM | 580 | CG | TYR | A | 197 | 257.289 | -59.034 | 92.959 | 1.00 | 43.03 | A | C |
| ATOM | 581 | CD1 | TYR | A | 197 | 257.445 | -58.246 | 94.117 | 1.00 | 44.46 | A | C |
| ATOM | 582 | CE1 | TYR | A | 197 | 256.439 | -57.433 | 94.583 | 1.00 | 51.15 | A | C |
| ATOM | 583 | CD2 | TYR | A | 197 | 256.085 | -58.978 | 92.278 | 1.00 | 41.30 | A | C |
| ATOM | 584 | CE2 | TYR | A | 197 | 255.057 | -58.161 | 92.730 | 1.00 | 50.46 | A | C |
| ATOM | 585 | CZ | TYR | A | 197 | 255.243 | -57.390 | 93.887 | 1.00 | 52.65 | A | C |
| ATOM | 586 | OH | TYR | A | 197 | 254.234 | -56.573 | 94.338 | 1.00 | 63.16 | A | O |
| ATOM | 587 | C | TYR | A | 197 | 259.142 | -62.186 | 91.684 | 1.00 | 51.16 | A | C |
| ATOM | 588 | O | TYR | A | 197 | 259.129 | -62.683 | 90.572 | 1.00 | 58.21 | A | O |
| ATOM | 589 | N | GLY | A | 198 | 260.141 | -62.378 | 92.529 | 1.00 | 53.24 | A | N |
| ATOM | 590 | CA | GLY | A | 198 | 261.296 | -63.164 | 92.148 | 1.00 | 47.33 | A | C |
| ATOM | 591 | C | GLY | A | 198 | 262.028 | -63.697 | 93.360 | 1.00 | 48.93 | A | C |
| ATOM | 592 | O | GLY | A | 198 | 261.447 | -63.928 | 94.412 | 1.00 | 49.80 | A | O |
| ATOM | 593 | N | TYR | A | 199 | 263.316 | -63.941 | 93.204 | 1.00 | 48.77 | A | N |
| ATOM | 594 | CA | TYR | A | 199 | 264.134 | -64.436 | 94.315 | 1.00 | 50.98 | A | C |
| ATOM | 595 | CB | TYR | A | 199 | 263.712 | -65.834 | 94.699 | 1.00 | 54.11 | A | C |
| ATOM | 596 | CG | TYR | A | 199 | 264.323 | -66.921 | 93.853 | 1.00 | 56.57 | A | C |
| ATOM | 597 | CD1 | TYR | A | 199 | 265.506 | -67.521 | 94.238 | 1.00 | 57.21 | A | C |
| ATOM | 598 | CE1 | TYR | A | 199 | 266.088 | -68.526 | 93.471 | 1.00 | 58.18 | A | C |
| ATOM | 599 | CD2 | TYR | A | 199 | 263.715 | -67.351 | 92.664 | 1.00 | 59.67 | A | C |
| ATOM | 600 | CE2 | TYR | A | 199 | 264.286 | -68.349 | 91.899 | 1.00 | 59.17 | A | C |
| ATOM | 601 | CZ | TYR | A | 199 | 265.479 | -68.933 | 92.308 | 1.00 | 59.36 | A | C |
| ATOM | 602 | OH | TYR | A | 199 | 266.075 | -69.917 | 91.535 | 1.00 | 63.54 | A | O |
| ATOM | 603 | C | TYR | A | 199 | 265.563 | -64.463 | 93.826 | 1.00 | 48.41 | A | C |
| ATOM | 604 | O | TYR | A | 199 | 265.787 | -64.357 | 92.640 | 1.00 | 47.41 | A | O |
| ATOM | 605 | N | PHE | A | 200 | 266.542 | -64.591 | 94.701 | 1.00 | 43.25 | A | N |
| ATOM | 606 | CA | PHE | A | 200 | 267.921 | -64.582 | 94.221 | 1.00 | 40.67 | A | C |
| ATOM | 607 | CB | PHE | A | 200 | 268.427 | -63.159 | 93.950 | 1.00 | 43.34 | A | C |
| ATOM | 608 | CG | PHE | A | 200 | 268.272 | -62.218 | 95.134 | 1.00 | 48.79 | A | C |
| ATOM | 609 | CD1 | PHE | A | 200 | 269.249 | -62.115 | 96.166 | 1.00 | 50.06 | A | C |
| ATOM | 610 | CD2 | PHE | A | 200 | 267.178 | -61.322 | 95.162 | 1.00 | 52.88 | A | C |
| ATOM | 611 | CE1 | PHE | A | 200 | 269.107 | -61.097 | 97.192 | 1.00 | 53.41 | A | C |
| ATOM | 612 | CE2 | PHE | A | 200 | 267.048 | -60.331 | 96.166 | 1.00 | 49.85 | A | C |
| ATOM | 613 | CZ | PHE | A | 200 | 267.993 | -60.201 | 97.160 | 1.00 | 49.27 | A | C |
| ATOM | 614 | C | PHE | A | 200 | 268.645 | -65.113 | 95.325 | 1.00 | 47.09 | A | C |
| ATOM | 615 | O | PHE | A | 200 | 268.037 | -65.599 | 96.262 | 1.00 | 47.13 | A | O |
| ATOM | 616 | N | HIS | A | 201 | 269.953 | -65.125 | 95.219 | 1.00 | 56.46 | A | N |
| ATOM | 617 | CA | HIS | A | 201 | 270.635 | -65.604 | 96.382 | 1.00 | 56.94 | A | C |
| ATOM | 618 | CB | HIS | A | 201 | 270.242 | -67.052 | 96.679 | 1.00 | 62.89 | A | C |
| ATOM | 619 | CG | HIS | A | 201 | 270.668 | -68.030 | 95.648 | 1.00 | 66.27 | A | C |
| ATOM | 620 | CD2 | HIS | A | 201 | 270.131 | -68.454 | 94.469 | 1.00 | 68.86 | A | C |
| ATOM | 621 | ND1 | HIS | A | 201 | 271.876 | -68.658 | 95.778 | 1.00 | 70.42 | A | N |
| ATOM | 622 | CE1 | HIS | A | 201 | 272.086 | -69.425 | 94.727 | 1.00 | 63.77 | A | C |

| | | | | | | | | | | | | |
|------|-----|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 623 | NE2 | HIS | A | 201 | 271.048 | -69.319 | 93.917 | 1.00 | 69.53 | A | N |
| ATOM | 624 | C | HIS | A | 201 | 272.082 | -65.339 | 96.531 | 1.00 | 59.01 | A | C |
| ATOM | 625 | O | HIS | A | 201 | 272.657 | -64.604 | 95.737 | 1.00 | 56.46 | A | O |
| ATOM | 626 | N | ASP | A | 202 | 272.636 | -65.783 | 97.652 | 1.00 | 53.50 | A | N |
| ATOM | 627 | CA | ASP | A | 202 | 274.052 | -65.546 | 97.850 | 1.00 | 58.12 | A | C |
| ATOM | 628 | CB | ASP | A | 202 | 274.321 | -64.225 | 98.617 | 1.00 | 61.13 | A | C |
| ATOM | 629 | CG | ASP | A | 202 | 273.888 | -64.255 | 100.090 | 1.00 | 65.37 | A | C |
| ATOM | 630 | OD1 | ASP | A | 202 | 273.969 | -65.308 | 100.803 | 1.00 | 69.09 | A | O |
| ATOM | 631 | OD2 | ASP | A | 202 | 273.489 | -63.181 | 100.569 | 1.00 | 73.25 | A | O |
| ATOM | 632 | C | ASP | A | 202 | 274.782 | -66.745 | 98.522 | 1.00 | 59.73 | A | C |
| ATOM | 633 | O | ASP | A | 202 | 274.357 | -67.899 | 98.426 | 1.00 | 61.93 | A | O |
| ATOM | 634 | N | ALA | A | 203 | 275.910 | -66.473 | 99.163 | 1.00 | 59.60 | A | N |
| ATOM | 635 | CA | ALA | A | 203 | 276.705 | -67.507 | 99.793 | 1.00 | 59.87 | A | C |
| ATOM | 636 | CB | ALA | A | 203 | 278.079 | -66.933 | 100.191 | 1.00 | 57.31 | A | C |
| ATOM | 637 | C | ALA | A | 203 | 276.068 | -68.138 | 100.990 | 1.00 | 60.08 | A | C |
| ATOM | 638 | O | ALA | A | 203 | 276.287 | -69.294 | 101.229 | 1.00 | 62.79 | A | O |
| ATOM | 639 | N | THR | A | 204 | 275.291 | -67.377 | 101.748 | 1.00 | 60.13 | A | N |
| ATOM | 640 | CA | THR | A | 204 | 274.700 | -67.893 | 102.968 | 1.00 | 58.14 | A | C |
| ATOM | 641 | CB | THR | A | 204 | 275.067 | -67.010 | 104.168 | 1.00 | 54.92 | A | C |
| ATOM | 642 | OG1 | THR | A | 204 | 275.068 | -65.622 | 103.799 | 1.00 | 51.82 | A | O |
| ATOM | 643 | CG2 | THR | A | 204 | 276.406 | -67.388 | 104.681 | 1.00 | 55.25 | A | C |
| ATOM | 644 | C | THR | A | 204 | 273.203 | -68.070 | 102.993 | 1.00 | 61.74 | A | C |
| ATOM | 645 | O | THR | A | 204 | 272.662 | -69.063 | 103.547 | 1.00 | 66.23 | A | O |
| ATOM | 646 | N | ARG | A | 205 | 272.517 | -67.099 | 102.434 | 1.00 | 58.56 | A | N |
| ATOM | 647 | CA | ARG | A | 205 | 271.091 | -67.217 | 102.444 | 1.00 | 58.96 | A | C |
| ATOM | 648 | CB | ARG | A | 205 | 270.505 | -66.287 | 103.493 | 1.00 | 56.07 | A | C |
| ATOM | 649 | CG | ARG | A | 205 | 270.986 | -64.877 | 103.382 | 1.00 | 59.74 | A | C |
| ATOM | 650 | CD | ARG | A | 205 | 271.764 | -64.493 | 104.616 | 1.00 | 62.84 | A | C |
| ATOM | 651 | NE | ARG | A | 205 | 272.739 | -63.462 | 104.285 | 1.00 | 73.59 | A | N |
| ATOM | 652 | CZ | ARG | A | 205 | 273.407 | -62.747 | 105.185 | 1.00 | 79.55 | A | C |
| ATOM | 653 | NH1 | ARG | A | 205 | 273.198 | -62.946 | 106.482 | 1.00 | 80.70 | A | N |
| ATOM | 654 | NH2 | ARG | A | 205 | 274.297 | -61.845 | 104.792 | 1.00 | 87.21 | A | N |
| ATOM | 655 | C | ARG | A | 205 | 270.418 | -67.012 | 101.120 | 1.00 | 56.37 | A | C |
| ATOM | 656 | O | ARG | A | 205 | 271.034 | -66.604 | 100.116 | 1.00 | 64.50 | A | O |
| ATOM | 657 | N | VAL | A | 206 | 269.150 | -67.373 | 101.124 | 1.00 | 54.49 | A | N |
| ATOM | 658 | CA | VAL | A | 206 | 268.304 | -67.238 | 99.960 | 1.00 | 50.29 | A | C |
| ATOM | 659 | CB | VAL | A | 206 | 267.536 | -68.522 | 99.670 | 1.00 | 47.01 | A | C |
| ATOM | 660 | CG1 | VAL | A | 206 | 266.800 | -68.370 | 98.374 | 1.00 | 38.39 | A | C |
| ATOM | 661 | CG2 | VAL | A | 206 | 268.488 | -69.696 | 99.620 | 1.00 | 42.93 | A | C |
| ATOM | 662 | C | VAL | A | 206 | 267.306 | -66.124 | 100.321 | 1.00 | 50.23 | A | C |
| ATOM | 663 | O | VAL | A | 206 | 266.870 | -65.982 | 101.487 | 1.00 | 49.82 | A | O |
| ATOM | 664 | N | TYR | A | 207 | 266.958 | -65.330 | 99.320 | 1.00 | 47.64 | A | N |
| ATOM | 665 | CA | TYR | A | 207 | 266.053 | -64.226 | 99.517 | 1.00 | 47.19 | A | C |
| ATOM | 666 | CB | TYR | A | 207 | 266.748 | -62.879 | 99.204 | 1.00 | 44.49 | A | C |
| ATOM | 667 | CG | TYR | A | 207 | 268.077 | -62.684 | 99.852 | 1.00 | 52.24 | A | C |
| ATOM | 668 | CD1 | TYR | A | 207 | 269.198 | -63.362 | 99.385 | 1.00 | 51.97 | A | C |
| ATOM | 669 | CE1 | TYR | A | 207 | 270.438 | -63.194 | 99.978 | 1.00 | 60.89 | A | C |
| ATOM | 670 | CD2 | TYR | A | 207 | 268.227 | -61.820 | 100.938 | 1.00 | 55.49 | A | C |
| ATOM | 671 | CE2 | TYR | A | 207 | 269.499 | -61.638 | 101.553 | 1.00 | 62.31 | A | C |
| ATOM | 672 | CZ | TYR | A | 207 | 270.583 | -62.327 | 101.069 | 1.00 | 60.88 | A | C |
| ATOM | 673 | OH | TYR | A | 207 | 271.783 | -62.141 | 101.704 | 1.00 | 68.24 | A | O |
| ATOM | 674 | C | TYR | A | 207 | 264.837 | -64.374 | 98.618 | 1.00 | 42.31 | A | C |
| ATOM | 675 | O | TYR | A | 207 | 264.940 | -64.704 | 97.438 | 1.00 | 43.03 | A | O |
| ATOM | 676 | N | LEU | A | 208 | 263.671 | -64.078 | 99.171 | 1.00 | 47.18 | A | N |
| ATOM | 677 | CA | LEU | A | 208 | 262.441 | -64.129 | 98.377 | 1.00 | 49.66 | A | C |
| ATOM | 678 | CB | LEU | A | 208 | 261.411 | -65.084 | 99.005 | 1.00 | 50.68 | A | C |
| ATOM | 679 | CG | LEU | A | 208 | 261.731 | -66.573 | 98.967 | 1.00 | 50.97 | A | C |
| ATOM | 680 | CD1 | LEU | A | 208 | 260.525 | -67.349 | 99.471 | 1.00 | 51.61 | A | C |
| ATOM | 681 | CD2 | LEU | A | 208 | 262.019 | -66.964 | 97.575 | 1.00 | 53.77 | A | C |
| ATOM | 682 | C | LEU | A | 208 | 261.849 | -62.733 | 98.264 | 1.00 | 50.25 | A | C |
| ATOM | 683 | O | LEU | A | 208 | 261.525 | -62.085 | 99.278 | 1.00 | 54.78 | A | O |
| ATOM | 684 | N | ILE | A | 209 | 261.692 | -62.286 | 97.027 | 1.00 | 50.37 | A | N |
| ATOM | 685 | CA | ILE | A | 209 | 261.154 | -60.971 | 96.752 | 1.00 | 49.74 | A | C |
| ATOM | 686 | CB | ILE | A | 209 | 261.695 | -60.499 | 95.420 | 1.00 | 50.44 | A | C |
| ATOM | 687 | CG2 | ILE | A | 209 | 261.168 | -59.096 | 95.082 | 1.00 | 50.97 | A | C |
| ATOM | 688 | CG1 | ILE | A | 209 | 263.225 | -60.485 | 95.511 | 1.00 | 49.66 | A | C |
| ATOM | 689 | CD1 | ILE | A | 209 | 263.919 | -60.607 | 94.181 | 1.00 | 51.66 | A | C |
| ATOM | 690 | C | ILE | A | 209 | 259.624 | -61.075 | 96.749 | 1.00 | 51.17 | A | C |
| ATOM | 691 | O | ILE | A | 209 | 259.048 | -61.543 | 95.755 | 1.00 | 54.45 | A | O |
| ATOM | 692 | N | LEU | A | 210 | 258.981 | -60.655 | 97.854 | 1.00 | 47.03 | A | N |

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|------|-----|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 693 | CA | LEU | A | 210 | 257.530 | -60.728 | 97.990 | 1.00 | 43.40 | | |
| ATOM | 694 | CB | LEU | A | 210 | 257.164 | -61.286 | 99.362 | 1.00 | 43.91 | A | C |
| ATOM | 695 | CG | LEU | A | 210 | 257.762 | -62.625 | 99.773 | 1.00 | 42.46 | A | C |
| ATOM | 696 | CD1 | LEU | A | 210 | 257.695 | -62.764 | 101.264 | 1.00 | 44.44 | A | C |
| ATOM | 697 | CD2 | LEU | A | 210 | 257.029 | -63.701 | 99.100 | 1.00 | 44.23 | A | C |
| ATOM | 698 | C | LEU | A | 210 | 256.873 | -59.393 | 97.827 | 1.00 | 42.69 | A | C |
| ATOM | 699 | O | LEU | A | 210 | 257.528 | -58.371 | 97.627 | 1.00 | 50.83 | A | C |
| ATOM | 700 | N | GLU | A | 211 | 255.552 | -59.403 | 97.901 | 1.00 | 45.93 | A | O |
| ATOM | 701 | CA | GLU | A | 211 | 254.757 | -58.173 | 97.813 | 1.00 | 41.90 | A | N |
| ATOM | 702 | CB | GLU | A | 211 | 253.383 | -58.471 | 97.201 | 1.00 | 39.85 | A | C |
| ATOM | 703 | CG | GLU | A | 211 | 252.402 | -57.354 | 97.290 | 1.00 | 41.17 | A | C |
| ATOM | 704 | CD | GLU | A | 211 | 250.976 | -57.788 | 96.890 | 1.00 | 51.54 | A | C |
| ATOM | 705 | OE1 | GLU | A | 211 | 250.012 | -56.980 | 97.025 | 1.00 | 57.54 | A | C |
| ATOM | 706 | OE2 | GLU | A | 211 | 250.798 | -58.950 | 96.438 | 1.00 | 52.59 | A | O |
| ATOM | 707 | C | GLU | A | 211 | 254.608 | -57.669 | 99.259 | 1.00 | 38.67 | A | C |
| ATOM | 708 | O | GLU | A | 211 | 254.507 | -58.477 | 100.200 | 1.00 | 42.39 | A | C |
| ATOM | 709 | N | TYR | A | 212 | 254.619 | -56.346 | 99.428 | 1.00 | 43.63 | A | O |
| ATOM | 710 | CA | TYR | A | 212 | 254.500 | -55.725 | 100.757 | 1.00 | 47.96 | A | N |
| ATOM | 711 | CB | TYR | A | 212 | 255.181 | -54.338 | 100.753 | 1.00 | 46.03 | A | C |
| ATOM | 712 | CG | TYR | A | 212 | 255.029 | -53.534 | 102.025 | 1.00 | 44.95 | A | C |
| ATOM | 713 | CD1 | TYR | A | 212 | 255.255 | -54.104 | 103.259 | 1.00 | 42.54 | A | C |
| ATOM | 714 | CE1 | TYR | A | 212 | 255.084 | -53.363 | 104.429 | 1.00 | 48.54 | A | C |
| ATOM | 715 | CD2 | TYR | A | 212 | 254.639 | -52.193 | 101.984 | 1.00 | 44.86 | A | C |
| ATOM | 716 | CE2 | TYR | A | 212 | 254.473 | -51.424 | 103.164 | 1.00 | 50.04 | A | C |
| ATOM | 717 | CZ | TYR | A | 212 | 254.693 | -52.019 | 104.372 | 1.00 | 48.45 | A | C |
| ATOM | 718 | OH | TYR | A | 212 | 254.523 | -51.276 | 105.514 | 1.00 | 53.45 | A | C |
| ATOM | 719 | C | TYR | A | 212 | 253.041 | -55.618 | 101.248 | 1.00 | 50.57 | A | O |
| ATOM | 720 | O | TYR | A | 212 | 252.153 | -55.140 | 100.508 | 1.00 | 51.02 | A | C |
| ATOM | 721 | N | ALA | A | 213 | 252.799 | -56.105 | 102.475 | 1.00 | 48.23 | A | O |
| ATOM | 722 | CA | ALA | A | 213 | 251.459 | -56.040 | 103.078 | 1.00 | 51.96 | A | N |
| ATOM | 723 | CB | ALA | A | 213 | 251.084 | -57.386 | 103.656 | 1.00 | 42.77 | A | C |
| ATOM | 724 | C | ALA | A | 213 | 251.528 | -54.973 | 104.177 | 1.00 | 46.25 | A | C |
| ATOM | 725 | O | ALA | A | 213 | 251.958 | -55.259 | 105.280 | 1.00 | 57.39 | A | C |
| ATOM | 726 | N | PRO | A | 214 | 251.109 | -53.734 | 103.869 | 1.00 | 45.44 | A | O |
| ATOM | 727 | CD | PRO | A | 214 | 250.592 | -53.315 | 102.549 | 1.00 | 45.81 | A | N |
| ATOM | 728 | CA | PRO | A | 214 | 251.118 | -52.597 | 104.782 | 1.00 | 37.64 | A | C |
| ATOM | 729 | CB | PRO | A | 214 | 250.400 | -51.512 | 103.991 | 1.00 | 44.41 | A | C |
| ATOM | 730 | CG | PRO | A | 214 | 250.755 | -51.821 | 102.584 | 1.00 | 45.51 | A | C |
| ATOM | 731 | C | PRO | A | 214 | 250.481 | -52.833 | 106.112 | 1.00 | 39.63 | A | C |
| ATOM | 732 | O | PRO | A | 214 | 251.116 | -52.486 | 107.123 | 1.00 | 38.67 | A | C |
| ATOM | 733 | N | LEU | A | 215 | 249.287 | -53.446 | 106.124 | 1.00 | 33.01 | A | O |
| ATOM | 734 | CA | LEU | A | 215 | 248.570 | -53.617 | 107.371 | 1.00 | 35.54 | A | N |
| ATOM | 735 | CB | LEU | A | 215 | 247.074 | -53.585 | 107.083 | 1.00 | 39.80 | A | C |
| ATOM | 736 | CG | LEU | A | 215 | 246.571 | -52.332 | 106.331 | 1.00 | 39.22 | A | C |
| ATOM | 737 | CD1 | LEU | A | 215 | 245.025 | -52.236 | 106.407 | 1.00 | 37.56 | A | C |
| ATOM | 738 | CD2 | LEU | A | 215 | 247.156 | -51.166 | 106.898 | 1.00 | 36.39 | A | C |
| ATOM | 739 | C | LEU | A | 215 | 248.923 | -54.805 | 108.248 | 1.00 | 43.21 | A | C |
| ATOM | 740 | O | LEU | A | 215 | 248.208 | -55.121 | 109.220 | 1.00 | 39.03 | A | C |
| ATOM | 741 | N | GLY | A | 216 | 250.022 | -55.466 | 107.906 | 1.00 | 42.62 | A | O |
| ATOM | 742 | CA | GLY | A | 216 | 250.443 | -56.630 | 108.669 | 1.00 | 46.42 | A | N |
| ATOM | 743 | C | GLY | A | 216 | 249.594 | -57.891 | 108.554 | 1.00 | 44.15 | A | C |
| ATOM | 744 | O | GLY | A | 216 | 248.995 | -58.166 | 107.504 | 1.00 | 46.45 | A | C |
| ATOM | 745 | N | THR | A | 217 | 249.523 | -58.640 | 109.656 | 1.00 | 39.98 | A | O |
| ATOM | 746 | CA | THR | A | 217 | 248.774 | -59.889 | 109.669 | 1.00 | 43.21 | A | N |
| ATOM | 747 | CB | THR | A | 217 | 249.583 | -61.040 | 110.286 | 1.00 | 43.67 | A | C |
| ATOM | 748 | OG1 | THR | A | 217 | 249.791 | -60.782 | 111.678 | 1.00 | 51.00 | A | C |
| ATOM | 749 | CG2 | THR | A | 217 | 250.905 | -61.201 | 109.605 | 1.00 | 41.04 | A | O |
| ATOM | 750 | C | THR | A | 217 | 247.450 | -59.858 | 110.416 | 1.00 | 42.99 | A | C |
| ATOM | 751 | O | THR | A | 217 | 247.185 | -58.962 | 111.227 | 1.00 | 41.59 | A | C |
| ATOM | 752 | N | VAL | A | 218 | 246.646 | -60.881 | 110.166 | 1.00 | 41.73 | A | O |
| ATOM | 753 | CA | VAL | A | 218 | 245.335 | -61.037 | 110.766 | 1.00 | 41.12 | A | N |
| ATOM | 754 | CB | VAL | A | 218 | 244.564 | -62.091 | 109.970 | 1.00 | 41.84 | A | C |
| ATOM | 755 | CG1 | VAL | A | 218 | 243.170 | -62.251 | 110.488 | 1.00 | 43.61 | A | C |
| ATOM | 756 | CG2 | VAL | A | 218 | 244.544 | -61.670 | 108.463 | 1.00 | 33.71 | A | C |
| ATOM | 757 | C | VAL | A | 218 | 245.610 | -61.486 | 112.201 | 1.00 | 40.94 | A | C |
| ATOM | 758 | O | VAL | A | 218 | 244.789 | -61.326 | 113.078 | 1.00 | 51.00 | A | C |
| ATOM | 759 | N | TYR | A | 219 | 246.801 | -62.026 | 112.429 | 1.00 | 45.88 | A | O |
| ATOM | 760 | CA | TYR | A | 219 | 247.233 | -62.484 | 113.757 | 1.00 | 42.54 | A | N |
| ATOM | 761 | CB | TYR | A | 219 | 248.607 | -63.148 | 113.673 | 1.00 | 45.91 | A | C |
| ATOM | 762 | CG | TYR | A | 219 | 249.102 | -63.676 | 115.011 | 1.00 | 46.80 | A | C |

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|------|-----|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 763 | CD1 | TYR | A | 219 | 248.755 | -64.925 | 115.464 | 1.00 | 45.83 | A | C |
| ATOM | 764 | CE1 | TYR | A | 219 | 249.176 | -65.377 | 116.693 | 1.00 | 53.23 | A | C |
| ATOM | 765 | CD2 | TYR | A | 219 | 249.884 | -62.892 | 115.825 | 1.00 | 46.38 | A | C |
| ATOM | 766 | CE2 | TYR | A | 219 | 250.310 | -63.314 | 117.053 | 1.00 | 52.61 | A | C |
| ATOM | 767 | CZ | TYR | A | 219 | 249.961 | -64.565 | 117.510 | 1.00 | 53.76 | A | C |
| ATOM | 768 | OH | TYR | A | 219 | 250.361 | -64.985 | 118.789 | 1.00 | 54.10 | A | O |
| ATOM | 769 | C | TYR | A | 219 | 247.323 | -61.287 | 114.702 | 1.00 | 44.93 | A | C |
| ATOM | 770 | O | TYR | A | 219 | 246.745 | -61.322 | 115.825 | 1.00 | 40.09 | A | O |
| ATOM | 771 | N | ARG | A | 220 | 248.031 | -60.243 | 114.240 | 1.00 | 37.14 | A | N |
| ATOM | 772 | CA | ARG | A | 220 | 248.172 | -59.035 | 115.029 | 1.00 | 44.63 | A | C |
| ATOM | 773 | CB | ARG | A | 220 | 249.213 | -58.086 | 114.396 | 1.00 | 42.95 | A | C |
| ATOM | 774 | C | ARG | A | 220 | 246.828 | -58.318 | 115.225 | 1.00 | 43.95 | A | C |
| ATOM | 775 | O | ARG | A | 220 | 246.563 | -57.773 | 116.314 | 1.00 | 44.55 | A | O |
| ATOM | 776 | N | GLU | A | 221 | 245.973 | -58.369 | 114.198 | 1.00 | 44.85 | A | N |
| ATOM | 777 | CA | GLU | A | 221 | 244.688 | -57.692 | 114.255 | 1.00 | 43.30 | A | C |
| ATOM | 778 | CB | GLU | A | 221 | 244.031 | -57.678 | 112.884 | 1.00 | 46.86 | A | C |
| ATOM | 779 | CG | GLU | A | 221 | 242.921 | -56.648 | 112.713 | 1.00 | 56.65 | A | C |
| ATOM | 780 | CD | GLU | A | 221 | 243.442 | -55.193 | 112.758 | 1.00 | 63.09 | A | C |
| ATOM | 781 | OE1 | GLU | A | 221 | 242.629 | -54.238 | 112.637 | 1.00 | 66.10 | A | O |
| ATOM | 782 | OE2 | GLU | A | 221 | 244.670 | -55.005 | 112.919 | 1.00 | 66.07 | A | O |
| ATOM | 783 | C | GLU | A | 221 | 243.806 | -58.412 | 115.243 | 1.00 | 46.56 | A | C |
| ATOM | 784 | O | GLU | A | 221 | 242.959 | -57.802 | 115.900 | 1.00 | 44.66 | A | O |
| ATOM | 785 | N | LEU | A | 222 | 244.028 | -59.719 | 115.362 | 1.00 | 46.74 | A | N |
| ATOM | 786 | CA | LEU | A | 222 | 243.259 | -60.550 | 116.272 | 1.00 | 40.98 | A | C |
| ATOM | 787 | CB | LEU | A | 222 | 243.444 | -62.013 | 115.880 | 1.00 | 42.79 | A | C |
| ATOM | 788 | CG | LEU | A | 222 | 242.339 | -62.985 | 116.313 | 1.00 | 48.20 | A | C |
| ATOM | 789 | CD1 | LEU | A | 222 | 240.982 | -62.509 | 115.826 | 1.00 | 42.35 | A | C |
| ATOM | 790 | CD2 | LEU | A | 222 | 242.649 | -64.361 | 115.761 | 1.00 | 47.96 | A | C |
| ATOM | 791 | C | LEU | A | 222 | 243.744 | -60.292 | 117.718 | 1.00 | 45.64 | A | C |
| ATOM | 792 | O | LEU | A | 222 | 242.995 | -60.390 | 118.692 | 1.00 | 46.35 | A | O |
| ATOM | 793 | N | GLN | A | 223 | 245.008 | -59.938 | 117.875 | 1.00 | 47.19 | A | N |
| ATOM | 794 | CA | GLN | A | 223 | 245.539 | -59.670 | 119.203 | 1.00 | 48.16 | A | C |
| ATOM | 795 | CB | GLN | A | 223 | 247.056 | -59.584 | 119.112 | 1.00 | 49.22 | A | C |
| ATOM | 796 | CG | GLN | A | 223 | 247.819 | -60.926 | 119.032 | 1.00 | 56.96 | A | C |
| ATOM | 797 | CD | GLN | A | 223 | 249.300 | -60.732 | 118.879 | 1.00 | 66.12 | A | C |
| ATOM | 798 | OE1 | GLN | A | 223 | 249.807 | -59.935 | 117.981 | 1.00 | 68.93 | A | O |
| ATOM | 799 | NE2 | GLN | A | 223 | 250.067 | -61.453 | 119.755 | 1.00 | 65.96 | A | N |
| ATOM | 800 | C | GLN | A | 223 | 244.994 | -58.332 | 119.711 | 1.00 | 54.79 | A | C |
| ATOM | 801 | O | GLN | A | 223 | 244.710 | -58.153 | 120.899 | 1.00 | 63.31 | A | O |
| ATOM | 802 | N | LYS | A | 224 | 244.877 | -57.398 | 118.779 | 1.00 | 53.43 | A | N |
| ATOM | 803 | CA | LYS | A | 224 | 244.412 | -56.042 | 119.021 | 1.00 | 52.16 | A | C |
| ATOM | 804 | CB | LYS | A | 224 | 244.668 | -55.276 | 117.729 | 1.00 | 51.41 | A | C |
| ATOM | 805 | CG | LYS | A | 224 | 244.740 | -53.805 | 117.796 | 1.00 | 58.82 | A | C |
| ATOM | 806 | CD | LYS | A | 224 | 245.109 | -53.234 | 116.429 | 1.00 | 58.34 | A | C |
| ATOM | 807 | CE | LYS | A | 224 | 244.105 | -52.175 | 115.957 | 1.00 | 57.11 | A | C |
| ATOM | 808 | NZ | LYS | A | 224 | 243.509 | -52.549 | 114.632 | 1.00 | 62.05 | A | N |
| ATOM | 809 | C | LYS | A | 224 | 242.909 | -55.999 | 119.415 | 1.00 | 46.25 | A | C |
| ATOM | 810 | O | LYS | A | 224 | 242.551 | -55.374 | 120.392 | 1.00 | 53.53 | A | O |
| ATOM | 811 | N | LEU | A | 225 | 242.054 | -56.685 | 118.658 | 1.00 | 40.03 | A | N |
| ATOM | 812 | CA | LEU | A | 225 | 240.616 | -56.712 | 118.885 | 1.00 | 28.18 | A | C |
| ATOM | 813 | CB | LEU | A | 225 | 239.918 | -56.682 | 117.544 | 1.00 | 32.03 | A | C |
| ATOM | 814 | CG | LEU | A | 225 | 240.538 | -55.704 | 116.515 | 1.00 | 37.72 | A | C |
| ATOM | 815 | CD1 | LEU | A | 225 | 239.725 | -55.736 | 115.208 | 1.00 | 28.64 | A | C |
| ATOM | 816 | CD2 | LEU | A | 225 | 240.577 | -54.252 | 117.096 | 1.00 | 32.47 | A | C |
| ATOM | 817 | C | LEU | A | 225 | 240.076 | -57.907 | 119.686 | 1.00 | 39.70 | A | C |
| ATOM | 818 | O | LEU | A | 225 | 238.896 | -57.954 | 120.056 | 1.00 | 27.45 | A | O |
| ATOM | 819 | N | SER | A | 226 | 240.939 | -58.877 | 119.958 | 1.00 | 33.23 | A | N |
| ATOM | 820 | CA | SER | A | 226 | 240.528 | -60.051 | 120.695 | 1.00 | 38.91 | A | C |
| ATOM | 821 | CB | SER | A | 226 | 239.864 | -59.653 | 122.015 | 1.00 | 42.93 | A | C |
| ATOM | 822 | OG | SER | A | 226 | 240.536 | -58.570 | 122.642 | 1.00 | 59.01 | A | O |
| ATOM | 823 | C | SER | A | 226 | 239.548 | -60.869 | 119.867 | 1.00 | 40.96 | A | C |
| ATOM | 824 | O | SER | A | 226 | 239.777 | -62.029 | 119.592 | 1.00 | 45.01 | A | O |
| ATOM | 825 | N | LYS | A | 227 | 238.433 | -60.270 | 119.484 | 1.00 | 43.12 | A | N |
| ATOM | 826 | CA | LYS | A | 227 | 237.409 | -60.968 | 118.693 | 1.00 | 37.87 | A | C |
| ATOM | 827 | CB | LYS | A | 227 | 236.160 | -61.246 | 119.551 | 1.00 | 41.34 | A | C |
| ATOM | 828 | CG | LYS | A | 227 | 236.384 | -62.150 | 120.650 | 1.00 | 49.95 | A | C |
| ATOM | 829 | CD | LYS | A | 227 | 235.126 | -62.365 | 121.469 | 1.00 | 59.51 | A | C |
| ATOM | 830 | CE | LYS | A | 227 | 234.854 | -61.186 | 122.468 | 1.00 | 64.97 | A | C |
| ATOM | 831 | NZ | LYS | A | 227 | 234.813 | -61.628 | 123.907 | 1.00 | 64.50 | A | N |
| ATOM | 832 | C | LYS | A | 227 | 237.009 | -60.044 | 117.520 | 1.00 | 37.96 | A | C |

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|------|-----|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 833 | O | LYS | A | 227 | 237.061 | -58.799 | 117.619 | 1.00 | 40.95 | A | O |
| ATOM | 834 | N | PHE | A | 228 | 236.575 | -60.655 | 116.431 | 1.00 | 34.94 | A | N |
| ATOM | 835 | CA | PHE | A | 228 | 236.175 | -59.917 | 115.262 | 1.00 | 34.74 | A | C |
| ATOM | 836 | CB | PHE | A | 228 | 236.793 | -60.534 | 113.998 | 1.00 | 34.85 | A | C |
| ATOM | 837 | CG | PHE | A | 228 | 238.248 | -60.293 | 113.849 | 1.00 | 43.10 | A | C |
| ATOM | 838 | CD1 | PHE | A | 228 | 238.975 | -61.009 | 112.913 | 1.00 | 43.37 | A | C |
| ATOM | 839 | CD2 | PHE | A | 228 | 238.899 | -59.395 | 114.656 | 1.00 | 38.38 | A | C |
| ATOM | 840 | CE1 | PHE | A | 228 | 240.341 | -60.832 | 112.796 | 1.00 | 48.51 | A | C |
| ATOM | 841 | CE2 | PHE | A | 228 | 240.266 | -59.207 | 114.554 | 1.00 | 47.20 | A | C |
| ATOM | 842 | CZ | PHE | A | 228 | 240.999 | -59.919 | 113.631 | 1.00 | 48.16 | A | C |
| ATOM | 843 | C | PHE | A | 228 | 234.654 | -60.063 | 115.208 | 1.00 | 40.38 | A | C |
| ATOM | 844 | O | PHE | A | 228 | 234.102 | -61.082 | 115.664 | 1.00 | 36.38 | A | O |
| ATOM | 845 | N | ASP | A | 229 | 233.963 | -59.053 | 114.687 | 1.00 | 40.55 | A | N |
| ATOM | 846 | CA | ASP | A | 229 | 232.525 | -59.184 | 114.534 | 1.00 | 38.86 | A | C |
| ATOM | 847 | CB | ASP | A | 229 | 231.823 | -57.832 | 114.440 | 1.00 | 49.26 | A | C |
| ATOM | 848 | CG | ASP | A | 229 | 232.394 | -56.912 | 113.357 | 1.00 | 51.97 | A | C |
| ATOM | 849 | OD1 | ASP | A | 229 | 232.396 | -57.278 | 112.179 | 1.00 | 54.02 | A | O |
| ATOM | 850 | OD2 | ASP | A | 229 | 232.806 | -55.788 | 113.699 | 1.00 | 55.60 | A | O |
| ATOM | 851 | C | ASP | A | 229 | 232.180 | -60.027 | 113.304 | 1.00 | 41.70 | A | C |
| ATOM | 852 | O | ASP | A | 229 | 233.039 | -60.366 | 112.480 | 1.00 | 35.62 | A | O |
| ATOM | 853 | N | GLU | A | 230 | 230.905 | -60.365 | 113.193 | 1.00 | 40.43 | A | N |
| ATOM | 854 | CA | GLU | A | 230 | 230.434 | -61.213 | 112.114 | 1.00 | 43.61 | A | C |
| ATOM | 855 | CB | GLU | A | 230 | 228.939 | -61.526 | 112.298 | 1.00 | 43.33 | A | C |
| ATOM | 856 | CG | GLU | A | 230 | 228.630 | -62.147 | 113.653 | 1.00 | 43.90 | A | C |
| ATOM | 857 | CD | GLU | A | 230 | 227.292 | -62.967 | 113.627 | 1.00 | 48.51 | A | C |
| ATOM | 858 | OE1 | GLU | A | 230 | 226.230 | -62.374 | 113.308 | 1.00 | 37.93 | A | O |
| ATOM | 859 | OE2 | GLU | A | 230 | 227.300 | -64.204 | 113.916 | 1.00 | 42.11 | A | O |
| ATOM | 860 | C | GLU | A | 230 | 230.661 | -60.546 | 110.778 | 1.00 | 43.16 | A | C |
| ATOM | 861 | O | GLU | A | 230 | 230.878 | -61.205 | 109.779 | 1.00 | 50.29 | A | O |
| ATOM | 862 | N | GLN | A | 231 | 230.590 | -59.225 | 110.748 | 1.00 | 49.18 | A | N |
| ATOM | 863 | CA | GLN | A | 231 | 230.742 | -58.501 | 109.489 | 1.00 | 49.70 | A | C |
| ATOM | 864 | CB | GLN | A | 231 | 230.311 | -57.029 | 109.685 | 1.00 | 57.14 | A | C |
| ATOM | 865 | CG | GLN | A | 231 | 229.958 | -56.236 | 108.412 | 1.00 | 62.54 | A | C |
| ATOM | 866 | CD | GLN | A | 231 | 231.200 | -55.770 | 107.642 | 1.00 | 71.69 | A | C |
| ATOM | 867 | OE1 | GLN | A | 231 | 232.065 | -55.042 | 108.191 | 1.00 | 72.68 | A | O |
| ATOM | 868 | NE2 | GLN | A | 231 | 231.300 | -56.184 | 106.359 | 1.00 | 72.33 | A | N |
| ATOM | 869 | C | GLN | A | 231 | 232.197 | -58.614 | 109.018 | 1.00 | 45.76 | A | C |
| ATOM | 870 | O | GLN | A | 231 | 232.470 | -58.874 | 107.846 | 1.00 | 46.46 | A | O |
| ATOM | 871 | N | ARG | A | 232 | 233.131 | -58.437 | 109.949 | 1.00 | 43.95 | A | N |
| ATOM | 872 | CA | ARG | A | 232 | 234.560 | -58.503 | 109.661 | 1.00 | 38.33 | A | C |
| ATOM | 873 | CB | ARG | A | 232 | 235.365 | -57.998 | 110.861 | 1.00 | 39.16 | A | C |
| ATOM | 874 | CG | ARG | A | 232 | 236.867 | -58.073 | 110.703 | 1.00 | 31.46 | A | C |
| ATOM | 875 | CD | ARG | A | 232 | 237.514 | -57.172 | 111.705 | 1.00 | 51.25 | A | C |
| ATOM | 876 | NE | ARG | A | 232 | 238.871 | -56.815 | 111.334 | 1.00 | 58.24 | A | N |
| ATOM | 877 | CZ | ARG | A | 232 | 239.275 | -55.581 | 111.111 | 1.00 | 65.45 | A | C |
| ATOM | 878 | NH1 | ARG | A | 232 | 238.395 | -54.594 | 111.226 | 1.00 | 62.94 | A | N |
| ATOM | 879 | NH2 | ARG | A | 232 | 240.551 | -55.369 | 110.780 | 1.00 | 72.17 | A | N |
| ATOM | 880 | C | ARG | A | 232 | 234.950 | -59.946 | 109.369 | 1.00 | 42.02 | A | C |
| ATOM | 881 | O | ARG | A | 232 | 235.757 | -60.183 | 108.517 | 1.00 | 45.04 | A | O |
| ATOM | 882 | N | THR | A | 233 | 234.372 | -60.909 | 110.084 | 1.00 | 43.50 | A | N |
| ATOM | 883 | CA | THR | A | 233 | 234.697 | -62.320 | 109.891 | 1.00 | 37.00 | A | C |
| ATOM | 884 | CB | THR | A | 233 | 234.104 | -63.175 | 110.992 | 1.00 | 35.89 | A | C |
| ATOM | 885 | OG1 | THR | A | 233 | 234.543 | -62.696 | 112.268 | 1.00 | 30.74 | A | O |
| ATOM | 886 | CG2 | THR | A | 233 | 234.488 | -64.641 | 110.763 | 1.00 | 22.73 | A | C |
| ATOM | 887 | C | THR | A | 233 | 234.149 | -62.834 | 108.555 | 1.00 | 45.73 | A | C |
| ATOM | 888 | O | THR | A | 233 | 234.857 | -63.523 | 107.844 | 1.00 | 45.99 | A | O |
| ATOM | 889 | N | ALA | A | 234 | 232.892 | -62.501 | 108.228 | 1.00 | 44.83 | A | N |
| ATOM | 890 | CA | ALA | A | 234 | 232.256 | -62.897 | 106.960 | 1.00 | 41.77 | A | C |
| ATOM | 891 | CB | ALA | A | 234 | 230.852 | -62.351 | 106.893 | 1.00 | 39.48 | A | C |
| ATOM | 892 | C | ALA | A | 234 | 233.064 | -62.395 | 105.744 | 1.00 | 44.77 | A | C |
| ATOM | 893 | O | ALA | A | 234 | 233.273 | -63.131 | 104.786 | 1.00 | 39.69 | A | O |
| ATOM | 894 | N | THR | A | 235 | 233.543 | -61.155 | 105.799 | 1.00 | 43.07 | A | N |
| ATOM | 895 | CA | THR | A | 235 | 234.328 | -60.579 | 104.722 | 1.00 | 44.31 | A | C |
| ATOM | 896 | CB | THR | A | 235 | 234.557 | -59.058 | 104.926 | 1.00 | 44.88 | A | C |
| ATOM | 897 | OG1 | THR | A | 235 | 233.306 | -58.373 | 104.984 | 1.00 | 49.29 | A | O |
| ATOM | 898 | CG2 | THR | A | 235 | 235.343 | -58.498 | 103.807 | 1.00 | 37.93 | A | C |
| ATOM | 899 | C | THR | A | 235 | 235.689 | -61.252 | 104.654 | 1.00 | 47.59 | A | C |
| ATOM | 900 | O | THR | A | 235 | 236.169 | -61.504 | 103.551 | 1.00 | 49.69 | A | O |
| ATOM | 901 | N | TYR | A | 236 | 236.310 | -61.521 | 105.813 | 1.00 | 47.35 | A | N |
| ATOM | 902 | CA | TYR | A | 236 | 237.613 | -62.189 | 105.850 | 1.00 | 46.90 | A | C |

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|------|-----|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 903 | CB | TYR | A | 236 | 238.206 | -62.221 | 107.255 | 1.00 | 42.67 | A | C |
| ATOM | 904 | CG | TYR | A | 236 | 239.024 | -61.003 | 107.621 | 1.00 | 45.24 | A | C |
| ATOM | 905 | CD1 | TYR | A | 236 | 239.154 | -59.930 | 106.767 | 1.00 | 40.32 | A | C |
| ATOM | 906 | CE1 | TYR | A | 236 | 239.909 | -58.819 | 107.134 | 1.00 | 51.10 | A | C |
| ATOM | 907 | CD2 | TYR | A | 236 | 239.667 | -60.929 | 108.847 | 1.00 | 46.47 | A | C |
| ATOM | 908 | CE2 | TYR | A | 236 | 240.430 | -59.808 | 109.228 | 1.00 | 52.60 | A | C |
| ATOM | 909 | CZ | TYR | A | 236 | 240.542 | -58.764 | 108.367 | 1.00 | 49.08 | A | C |
| ATOM | 910 | OH | TYR | A | 236 | 241.265 | -57.653 | 108.719 | 1.00 | 58.26 | A | O |
| ATOM | 911 | C | TYR | A | 236 | 237.496 | -63.604 | 105.334 | 1.00 | 47.98 | A | C |
| ATOM | 912 | O | TYR | A | 236 | 238.469 | -64.148 | 104.832 | 1.00 | 58.71 | A | O |
| ATOM | 913 | N | ILE | A | 237 | 236.296 | -64.177 | 105.416 | 1.00 | 50.41 | A | N |
| ATOM | 914 | CA | ILE | A | 237 | 236.032 | -65.540 | 104.944 | 1.00 | 46.45 | A | C |
| ATOM | 915 | CB | ILE | A | 237 | 234.816 | -66.156 | 105.635 | 1.00 | 45.13 | A | C |
| ATOM | 916 | CG2 | ILE | A | 237 | 234.357 | -67.442 | 104.903 | 1.00 | 42.23 | A | C |
| ATOM | 917 | CG1 | ILE | A | 237 | 235.157 | -66.440 | 107.101 | 1.00 | 42.93 | A | C |
| ATOM | 918 | CD1 | ILE | A | 237 | 236.253 | -67.436 | 107.317 | 1.00 | 39.73 | A | C |
| ATOM | 919 | C | ILE | A | 237 | 235.798 | -65.597 | 103.462 | 1.00 | 51.53 | A | C |
| ATOM | 920 | O | ILE | A | 237 | 236.213 | -66.548 | 102.822 | 1.00 | 55.68 | A | O |
| ATOM | 921 | N | THR | A | 238 | 235.148 | -64.571 | 102.914 | 1.00 | 51.45 | A | N |
| ATOM | 922 | CA | THR | A | 238 | 234.858 | -64.526 | 101.471 | 1.00 | 44.65 | A | C |
| ATOM | 923 | CB | THR | A | 238 | 233.929 | -63.346 | 101.106 | 1.00 | 44.82 | A | C |
| ATOM | 924 | OG1 | THR | A | 238 | 232.653 | -63.512 | 101.719 | 1.00 | 43.65 | A | O |
| ATOM | 925 | CG2 | THR | A | 238 | 233.701 | -63.294 | 99.660 | 1.00 | 44.50 | A | C |
| ATOM | 926 | C | THR | A | 238 | 236.166 | -64.350 | 100.706 | 1.00 | 47.18 | A | C |
| ATOM | 927 | O | THR | A | 238 | 236.467 | -65.090 | 99.782 | 1.00 | 48.37 | A | O |
| ATOM | 928 | N | GLU | A | 239 | 236.956 | -63.367 | 101.116 | 1.00 | 49.98 | A | N |
| ATOM | 929 | CA | GLU | A | 239 | 238.239 | -63.082 | 100.473 | 1.00 | 52.23 | A | C |
| ATOM | 930 | CB | GLU | A | 239 | 238.937 | -61.932 | 101.203 | 1.00 | 54.22 | A | C |
| ATOM | 931 | CG | GLU | A | 239 | 238.139 | -60.624 | 101.260 | 1.00 | 55.95 | A | C |
| ATOM | 932 | CD | GLU | A | 239 | 238.811 | -59.573 | 102.137 | 1.00 | 58.38 | A | C |
| ATOM | 933 | OE1 | GLU | A | 239 | 239.056 | -59.843 | 103.333 | 1.00 | 65.65 | A | O |
| ATOM | 934 | OE2 | GLU | A | 239 | 239.099 | -58.468 | 101.634 | 1.00 | 60.73 | A | O |
| ATOM | 935 | C | GLU | A | 239 | 239.109 | -64.330 | 100.496 | 1.00 | 50.02 | A | C |
| ATOM | 936 | O | GLU | A | 239 | 239.851 | -64.616 | 99.561 | 1.00 | 55.72 | A | O |
| ATOM | 937 | N | LEU | A | 240 | 238.978 | -65.104 | 101.557 | 1.00 | 49.14 | A | N |
| ATOM | 938 | CA | LEU | A | 240 | 239.768 | -66.305 | 101.702 | 1.00 | 48.27 | A | C |
| ATOM | 939 | CB | LEU | A | 240 | 239.776 | -66.717 | 103.173 | 1.00 | 46.82 | A | C |
| ATOM | 940 | CG | LEU | A | 240 | 240.917 | -67.581 | 103.679 | 1.00 | 45.79 | A | C |
| ATOM | 941 | CD1 | LEU | A | 240 | 242.225 | -67.030 | 103.195 | 1.00 | 50.28 | A | C |
| ATOM | 942 | CD2 | LEU | A | 240 | 240.885 | -67.603 | 105.172 | 1.00 | 53.83 | A | C |
| ATOM | 943 | C | LEU | A | 240 | 239.209 | -67.420 | 100.833 | 1.00 | 49.65 | A | C |
| ATOM | 944 | O | LEU | A | 240 | 239.960 | -68.170 | 100.210 | 1.00 | 53.66 | A | O |
| ATOM | 945 | N | ALA | A | 241 | 237.883 | -67.519 | 100.778 | 1.00 | 45.02 | A | N |
| ATOM | 946 | CA | ALA | A | 241 | 237.222 | -68.549 | 99.965 | 1.00 | 50.04 | A | C |
| ATOM | 947 | CB | ALA | A | 241 | 235.724 | -68.611 | 100.256 | 1.00 | 39.53 | A | C |
| ATOM | 948 | C | ALA | A | 241 | 237.447 | -68.278 | 98.481 | 1.00 | 47.71 | A | C |
| ATOM | 949 | O | ALA | A | 241 | 237.495 | -69.203 | 97.682 | 1.00 | 54.94 | A | O |
| ATOM | 950 | N | ASN | A | 242 | 237.585 | -67.012 | 98.114 | 1.00 | 49.50 | A | N |
| ATOM | 951 | CA | ASN | A | 242 | 237.839 | -66.637 | 96.729 | 1.00 | 51.78 | A | C |
| ATOM | 952 | CB | ASN | A | 242 | 237.688 | -65.134 | 96.554 | 1.00 | 45.48 | A | C |
| ATOM | 953 | CG | ASN | A | 242 | 236.231 | -64.680 | 96.592 | 1.00 | 51.39 | A | C |
| ATOM | 954 | OD1 | ASN | A | 242 | 235.972 | -63.489 | 96.769 | 1.00 | 50.23 | A | O |
| ATOM | 955 | ND2 | ASN | A | 242 | 235.276 | -65.620 | 96.412 | 1.00 | 43.58 | A | N |
| ATOM | 956 | C | ASN | A | 242 | 239.241 | -67.046 | 96.330 | 1.00 | 50.85 | A | C |
| ATOM | 957 | O | ASN | A | 242 | 239.419 | -67.736 | 95.323 | 1.00 | 53.87 | A | O |
| ATOM | 958 | N | ALA | A | 243 | 240.230 | -66.625 | 97.119 | 1.00 | 48.27 | A | N |
| ATOM | 959 | CA | ALA | A | 243 | 241.629 | -66.970 | 96.861 | 1.00 | 42.21 | A | C |
| ATOM | 960 | CB | ALA | A | 243 | 242.534 | -66.345 | 97.913 | 1.00 | 45.13 | A | C |
| ATOM | 961 | C | ALA | A | 243 | 241.816 | -68.473 | 96.880 | 1.00 | 43.95 | A | C |
| ATOM | 962 | O | ALA | A | 243 | 242.498 | -69.016 | 96.026 | 1.00 | 42.43 | A | O |
| ATOM | 963 | N | LEU | A | 244 | 241.219 | -69.152 | 97.858 | 1.00 | 40.59 | A | N |
| ATOM | 964 | CA | LEU | A | 244 | 241.366 | -70.606 | 97.945 | 1.00 | 48.68 | A | C |
| ATOM | 965 | CB | LEU | A | 244 | 240.689 | -71.141 | 99.204 | 1.00 | 42.37 | A | C |
| ATOM | 966 | CG | LEU | A | 244 | 241.465 | -70.944 | 100.495 | 1.00 | 39.60 | A | C |
| ATOM | 967 | CD1 | LEU | A | 244 | 240.751 | -71.763 | 101.602 | 1.00 | 37.99 | A | C |
| ATOM | 968 | CD2 | LEU | A | 244 | 242.889 | -71.432 | 100.340 | 1.00 | 35.22 | A | C |
| ATOM | 969 | C | LEU | A | 244 | 240.779 | -71.311 | 96.702 | 1.00 | 56.87 | A | C |
| ATOM | 970 | O | LEU | A | 244 | 241.327 | -72.330 | 96.220 | 1.00 | 60.52 | A | O |
| ATOM | 971 | N | SER | A | 245 | 239.662 | -70.777 | 96.200 | 1.00 | 61.51 | A | N |
| ATOM | 972 | CA | SER | A | 245 | 239.010 | -71.317 | 95.018 | 1.00 | 61.35 | A | C |

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|------|------|-----|-----------|---------|---------|---------|------|-------|---|---|
| ATOM | 973 | CB | SER A 245 | 237.785 | -70.501 | 94.692 | 1.00 | 64.64 | A | C |
| ATOM | 974 | OG | SER A 245 | 237.339 | -70.779 | 93.390 | 1.00 | 71.14 | A | O |
| ATOM | 975 | C | SER A 245 | 239.981 | -71.242 | 93.855 | 1.00 | 63.54 | A | C |
| ATOM | 976 | O | SER A 245 | 240.179 | -72.233 | 93.134 | 1.00 | 63.37 | A | O |
| ATOM | 977 | N | TYR A 246 | 240.581 | -70.063 | 93.679 | 1.00 | 58.29 | A | N |
| ATOM | 978 | CA | TYR A 246 | 241.571 | -69.855 | 92.633 | 1.00 | 57.08 | A | C |
| ATOM | 979 | CB | TYR A 246 | 242.123 | -68.455 | 92.719 | 1.00 | 51.38 | A | C |
| ATOM | 980 | CG | TYR A 246 | 243.247 | -68.195 | 91.754 | 1.00 | 55.36 | A | C |
| ATOM | 981 | CD1 | TYR A 246 | 242.994 | -67.652 | 90.492 | 1.00 | 50.94 | A | C |
| ATOM | 982 | CE1 | TYR A 246 | 244.042 | -67.382 | 89.609 | 1.00 | 55.86 | A | C |
| ATOM | 983 | CD2 | TYR A 246 | 244.584 | -68.473 | 92.111 | 1.00 | 54.39 | A | C |
| ATOM | 984 | CE2 | TYR A 246 | 245.650 | -68.213 | 91.234 | 1.00 | 55.81 | A | C |
| ATOM | 985 | CZ | TYR A 246 | 245.372 | -67.665 | 89.982 | 1.00 | 55.07 | A | C |
| ATOM | 986 | OH | TYR A 246 | 246.409 | -67.409 | 89.112 | 1.00 | 55.05 | A | O |
| ATOM | 987 | C | TYR A 246 | 242.732 | -70.852 | 92.733 | 1.00 | 57.54 | A | C |
| ATOM | 988 | O | TYR A 246 | 243.234 | -71.322 | 91.718 | 1.00 | 64.40 | A | O |
| ATOM | 989 | N | CYS A 247 | 243.150 | -71.180 | 93.951 | 1.00 | 56.76 | A | N |
| ATOM | 990 | CA | CYS A 247 | 244.245 | -72.120 | 94.148 | 1.00 | 57.81 | A | C |
| ATOM | 991 | CB | CYS A 247 | 244.779 | -72.066 | 95.599 | 1.00 | 52.55 | A | C |
| ATOM | 992 | SG | CYS A 247 | 245.687 | -70.569 | 96.004 | 1.00 | 57.32 | A | S |
| ATOM | 993 | C | CYS A 247 | 243.813 | -73.538 | 93.837 | 1.00 | 59.03 | A | C |
| ATOM | 994 | O | CYS A 247 | 244.535 | -74.272 | 93.143 | 1.00 | 61.55 | A | O |
| ATOM | 995 | N | HIS A 248 | 242.659 | -73.930 | 94.374 | 1.00 | 60.08 | A | N |
| ATOM | 996 | CA | HIS A 248 | 242.151 | -75.291 | 94.156 | 1.00 | 58.63 | A | C |
| ATOM | 997 | CB | HIS A 248 | 240.916 | -75.540 | 95.036 | 1.00 | 57.40 | A | C |
| ATOM | 998 | CG | HIS A 248 | 241.217 | -75.606 | 96.496 | 1.00 | 54.60 | A | C |
| ATOM | 999 | CD2 | HIS A 248 | 242.393 | -75.694 | 97.160 | 1.00 | 54.55 | A | C |
| ATOM | 1000 | ND1 | HIS A 248 | 240.231 | -75.623 | 97.459 | 1.00 | 54.23 | A | N |
| ATOM | 1001 | CE1 | HIS A 248 | 240.789 | -75.721 | 98.654 | 1.00 | 51.97 | A | C |
| ATOM | 1002 | NE2 | HIS A 248 | 242.099 | -75.765 | 98.501 | 1.00 | 50.58 | A | N |
| ATOM | 1003 | C | HIS A 248 | 241.806 | -75.535 | 92.668 | 1.00 | 58.67 | A | C |
| ATOM | 1004 | O | HIS A 248 | 241.857 | -76.667 | 92.171 | 1.00 | 50.45 | A | O |
| ATOM | 1005 | N | SER A 249 | 241.459 | -74.464 | 91.959 | 1.00 | 53.97 | A | N |
| ATOM | 1006 | CA | SER A 249 | 241.133 | -74.589 | 90.550 | 1.00 | 58.32 | A | C |
| ATOM | 1007 | CB | SER A 249 | 240.647 | -73.248 | 89.991 | 1.00 | 55.40 | A | C |
| ATOM | 1008 | OG | SER A 249 | 241.757 | -72.480 | 89.526 | 1.00 | 54.94 | A | O |
| ATOM | 1009 | C | SER A 249 | 242.407 | -75.020 | 89.798 | 1.00 | 58.15 | A | C |
| ATOM | 1010 | O | SER A 249 | 242.326 | -75.573 | 88.707 | 1.00 | 70.94 | A | O |
| ATOM | 1011 | N | LYS A 250 | 243.574 | -74.746 | 90.370 | 1.00 | 51.49 | A | N |
| ATOM | 1012 | CA | LYS A 250 | 244.820 | -75.119 | 89.753 | 1.00 | 46.67 | A | C |
| ATOM | 1013 | CB | LYS A 250 | 245.818 | -73.947 | 89.805 | 1.00 | 31.37 | A | C |
| ATOM | 1014 | C | LYS A 250 | 245.364 | -76.343 | 90.494 | 1.00 | 50.71 | A | C |
| ATOM | 1015 | O | LYS A 250 | 246.506 | -76.755 | 90.233 | 1.00 | 60.01 | A | O |
| ATOM | 1016 | N | ARG A 251 | 244.553 | -76.931 | 91.389 | 1.00 | 52.78 | A | N |
| ATOM | 1017 | CA | ARG A 251 | 244.965 | -78.113 | 92.167 | 1.00 | 55.47 | A | C |
| ATOM | 1018 | CB | ARG A 251 | 245.383 | -79.258 | 91.244 | 1.00 | 58.86 | A | C |
| ATOM | 1019 | CG | ARG A 251 | 244.211 | -79.957 | 90.536 | 1.00 | 62.01 | A | C |
| ATOM | 1020 | CD | ARG A 251 | 244.126 | -81.392 | 90.989 | 1.00 | 65.71 | A | C |
| ATOM | 1021 | NE | ARG A 251 | 242.807 | -81.741 | 91.512 | 1.00 | 68.34 | A | N |
| ATOM | 1022 | CZ | ARG A 251 | 242.484 | -82.945 | 92.002 | 1.00 | 72.31 | A | C |
| ATOM | 1023 | NH1 | ARG A 251 | 243.384 | -83.929 | 92.045 | 1.00 | 72.96 | A | N |
| ATOM | 1024 | NH2 | ARG A 251 | 241.252 | -83.178 | 92.445 | 1.00 | 71.74 | A | N |
| ATOM | 1025 | C | ARG A 251 | 246.099 | -77.840 | 93.137 | 1.00 | 53.93 | A | C |
| ATOM | 1026 | O | ARG A 251 | 247.007 | -78.666 | 93.285 | 1.00 | 57.77 | A | O |
| ATOM | 1027 | N | VAL A 252 | 246.043 | -76.686 | 93.799 | 1.00 | 56.22 | A | N |
| ATOM | 1028 | CA | VAL A 252 | 247.072 | -76.314 | 94.774 | 1.00 | 53.20 | A | C |
| ATOM | 1029 | CB | VAL A 252 | 247.721 | -74.966 | 94.401 | 1.00 | 50.06 | A | C |
| ATOM | 1030 | CG1 | VAL A 252 | 248.682 | -74.549 | 95.463 | 1.00 | 49.54 | A | C |
| ATOM | 1031 | CG2 | VAL A 252 | 248.418 | -75.083 | 93.080 | 1.00 | 48.46 | A | C |
| ATOM | 1032 | C | VAL A 252 | 246.492 | -76.207 | 96.196 | 1.00 | 54.67 | A | C |
| ATOM | 1033 | O | VAL A 252 | 245.536 | -75.465 | 96.426 | 1.00 | 56.55 | A | O |
| ATOM | 1034 | N | ILE A 253 | 247.074 | -76.956 | 97.130 | 1.00 | 52.34 | A | N |
| ATOM | 1035 | CA | ILE A 253 | 246.641 | -76.948 | 98.498 | 1.00 | 42.71 | A | C |
| ATOM | 1036 | CB | ILE A 253 | 246.696 | -78.341 | 99.103 | 1.00 | 38.24 | A | C |
| ATOM | 1037 | CG2 | ILE A 253 | 245.676 | -78.449 | 100.219 | 1.00 | 44.12 | A | C |
| ATOM | 1038 | CG1 | ILE A 253 | 246.279 | -79.380 | 98.083 | 1.00 | 35.92 | A | C |
| ATOM | 1039 | CD1 | ILE A 253 | 246.298 | -80.813 | 98.644 | 1.00 | 42.55 | A | C |
| ATOM | 1040 | C | ILE A 253 | 247.600 | -76.096 | 99.279 | 1.00 | 48.08 | A | C |
| ATOM | 1041 | O | ILE A 253 | 248.803 | -76.288 | 99.163 | 1.00 | 60.87 | A | O |
| ATOM | 1042 | N | HIS A 254 | 247.084 | -75.165 | 100.086 | 1.00 | 50.60 | A | N |

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|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 1043 | CA | HIS | A | 254 | 247.955 | -74.319 | 100.906 | 1.00 | 45.11 | A | C |
| ATOM | 1044 | CB | HIS | A | 254 | 247.187 | -73.086 | 101.374 | 1.00 | 43.92 | A | C |
| ATOM | 1045 | CG | HIS | A | 254 | 248.071 | -72.014 | 101.916 | 1.00 | 44.85 | A | C |
| ATOM | 1046 | CD2 | HIS | A | 254 | 248.486 | -70.854 | 101.360 | 1.00 | 39.20 | A | C |
| ATOM | 1047 | ND1 | HIS | A | 254 | 248.670 | -72.089 | 103.158 | 1.00 | 39.59 | A | N |
| ATOM | 1048 | CE1 | HIS | A | 254 | 249.414 | -71.014 | 103.339 | 1.00 | 37.61 | A | C |
| ATOM | 1049 | NE2 | HIS | A | 254 | 249.318 | -70.250 | 102.265 | 1.00 | 38.54 | A | N |
| ATOM | 1050 | C | HIS | A | 254 | 248.490 | -75.117 | 102.103 | 1.00 | 44.15 | A | C |
| ATOM | 1051 | O | HIS | A | 254 | 249.681 | -75.123 | 102.372 | 1.00 | 48.22 | A | O |
| ATOM | 1052 | N | ARG | A | 255 | 247.587 | -75.802 | 102.793 | 1.00 | 42.94 | A | N |
| ATOM | 1053 | CA | ARG | A | 255 | 247.899 | -76.642 | 103.946 | 1.00 | 38.93 | A | C |
| ATOM | 1054 | CB | ARG | A | 255 | 248.829 | -77.796 | 103.512 | 1.00 | 44.03 | A | C |
| ATOM | 1055 | CG | ARG | A | 255 | 248.460 | -78.369 | 102.124 | 1.00 | 46.01 | A | C |
| ATOM | 1056 | CD | ARG | A | 255 | 249.154 | -79.689 | 101.884 | 1.00 | 54.38 | A | C |
| ATOM | 1057 | NE | ARG | A | 255 | 250.581 | -79.648 | 102.175 | 1.00 | 53.55 | A | N |
| ATOM | 1058 | CZ | ARG | A | 255 | 251.402 | -80.673 | 102.012 | 1.00 | 53.89 | A | C |
| ATOM | 1059 | NH1 | ARG | A | 255 | 250.938 | -81.808 | 101.562 | 1.00 | 52.04 | A | N |
| ATOM | 1060 | NH2 | ARG | A | 255 | 252.679 | -80.560 | 102.313 | 1.00 | 55.38 | A | N |
| ATOM | 1061 | C | ARG | A | 255 | 248.477 | -75.929 | 105.145 | 1.00 | 37.93 | A | C |
| ATOM | 1062 | O | ARG | A | 255 | 248.891 | -76.588 | 106.101 | 1.00 | 37.60 | A | O |
| ATOM | 1063 | N | ASP | A | 256 | 248.541 | -74.598 | 105.096 | 1.00 | 40.81 | A | N |
| ATOM | 1064 | CA | ASP | A | 256 | 249.090 | -73.852 | 106.231 | 1.00 | 41.86 | A | C |
| ATOM | 1065 | CB | ASP | A | 256 | 250.578 | -73.685 | 106.031 | 1.00 | 38.62 | A | C |
| ATOM | 1066 | CG | ASP | A | 256 | 251.299 | -73.245 | 107.284 | 1.00 | 42.25 | A | C |
| ATOM | 1067 | OD1 | ASP | A | 256 | 250.822 | -73.586 | 108.373 | 1.00 | 44.21 | A | O |
| ATOM | 1068 | OD2 | ASP | A | 256 | 252.367 | -72.594 | 107.177 | 1.00 | 39.16 | A | O |
| ATOM | 1069 | C | ASP | A | 256 | 248.415 | -72.491 | 106.390 | 1.00 | 45.37 | A | C |
| ATOM | 1070 | O | ASP | A | 256 | 249.065 | -71.464 | 106.563 | 1.00 | 52.63 | A | O |
| ATOM | 1071 | N | ILE | A | 257 | 247.092 | -72.503 | 106.340 | 1.00 | 49.04 | A | N |
| ATOM | 1072 | CA | ILE | A | 257 | 246.307 | -71.289 | 106.456 | 1.00 | 56.39 | A | C |
| ATOM | 1073 | CB | ILE | A | 257 | 244.939 | -71.461 | 105.776 | 1.00 | 52.32 | A | C |
| ATOM | 1074 | CG2 | ILE | A | 257 | 244.163 | -70.205 | 105.893 | 1.00 | 55.85 | A | C |
| ATOM | 1075 | CG1 | ILE | A | 257 | 245.143 | -71.785 | 104.305 | 1.00 | 60.94 | A | C |
| ATOM | 1076 | CD1 | ILE | A | 257 | 243.873 | -72.064 | 103.557 | 1.00 | 73.36 | A | C |
| ATOM | 1077 | C | ILE | A | 257 | 246.097 | -70.940 | 107.922 | 1.00 | 54.79 | A | C |
| ATOM | 1078 | O | ILE | A | 257 | 245.502 | -71.720 | 108.659 | 1.00 | 61.06 | A | O |
| ATOM | 1079 | N | LYS | A | 258 | 246.594 | -69.781 | 108.345 | 1.00 | 50.33 | A | N |
| ATOM | 1080 | CA | LYS | A | 258 | 246.428 | -69.356 | 109.719 | 1.00 | 46.70 | A | C |
| ATOM | 1081 | CB | LYS | A | 258 | 247.273 | -70.220 | 110.648 | 1.00 | 41.61 | A | C |
| ATOM | 1082 | CG | LYS | A | 258 | 248.687 | -70.371 | 110.232 | 1.00 | 49.22 | A | C |
| ATOM | 1083 | CD | LYS | A | 258 | 249.425 | -71.326 | 111.200 | 1.00 | 42.38 | A | C |
| ATOM | 1084 | CE | LYS | A | 258 | 250.826 | -71.627 | 110.697 | 1.00 | 51.66 | A | C |
| ATOM | 1085 | NZ | LYS | A | 258 | 251.488 | -72.718 | 111.456 | 1.00 | 40.89 | A | N |
| ATOM | 1086 | C | LYS | A | 258 | 246.756 | -67.876 | 109.860 | 1.00 | 45.25 | A | C |
| ATOM | 1087 | O | LYS | A | 258 | 247.504 | -67.337 | 109.042 | 1.00 | 41.75 | A | O |
| ATOM | 1088 | N | PRO | A | 259 | 246.189 | -67.209 | 110.898 | 1.00 | 38.54 | A | N |
| ATOM | 1089 | CD | PRO | A | 259 | 245.436 | -67.848 | 111.999 | 1.00 | 30.99 | A | C |
| ATOM | 1090 | CA | PRO | A | 259 | 246.389 | -65.786 | 111.172 | 1.00 | 33.18 | A | C |
| ATOM | 1091 | CB | PRO | A | 259 | 246.034 | -65.680 | 112.643 | 1.00 | 36.45 | A | C |
| ATOM | 1092 | CG | PRO | A | 259 | 244.915 | -66.649 | 112.762 | 1.00 | 29.46 | A | C |
| ATOM | 1093 | C | PRO | A | 259 | 247.783 | -65.250 | 110.858 | 1.00 | 39.75 | A | C |
| ATOM | 1094 | O | PRO | A | 259 | 247.899 | -64.163 | 110.345 | 1.00 | 46.84 | A | O |
| ATOM | 1095 | N | GLU | A | 260 | 248.836 | -65.999 | 111.177 | 1.00 | 43.95 | A | N |
| ATOM | 1096 | CA | GLU | A | 260 | 250.227 | -65.591 | 110.916 | 1.00 | 44.86 | A | C |
| ATOM | 1097 | CB | GLU | A | 260 | 251.224 | -66.603 | 111.505 | 1.00 | 50.78 | A | C |
| ATOM | 1098 | CG | GLU | A | 260 | 251.039 | -66.922 | 112.948 | 1.00 | 65.67 | A | C |
| ATOM | 1099 | CD | GLU | A | 260 | 249.918 | -67.897 | 113.213 | 1.00 | 69.34 | A | C |
| ATOM | 1100 | OE1 | GLU | A | 260 | 248.727 | -67.499 | 113.338 | 1.00 | 69.34 | A | O |
| ATOM | 1101 | OE2 | GLU | A | 260 | 250.264 | -69.089 | 113.299 | 1.00 | 80.21 | A | O |
| ATOM | 1102 | C | GLU | A | 260 | 250.514 | -65.476 | 109.430 | 1.00 | 39.11 | A | C |
| ATOM | 1103 | O | GLU | A | 260 | 251.197 | -64.554 | 109.027 | 1.00 | 44.76 | A | O |
| ATOM | 1104 | N | ASN | A | 261 | 250.029 | -66.425 | 108.622 | 1.00 | 40.15 | A | N |
| ATOM | 1105 | CA | ASN | A | 261 | 250.246 | -66.396 | 107.162 | 1.00 | 38.92 | A | C |
| ATOM | 1106 | CB | ASN | A | 261 | 250.401 | -67.817 | 106.608 | 1.00 | 36.39 | A | C |
| ATOM | 1107 | CG | ASN | A | 261 | 251.539 | -68.579 | 107.266 | 1.00 | 36.54 | A | C |
| ATOM | 1108 | OD1 | ASN | A | 261 | 252.609 | -68.045 | 107.462 | 1.00 | 41.73 | A | O |
| ATOM | 1109 | ND2 | ASN | A | 261 | 251.317 | -69.831 | 107.578 | 1.00 | 30.81 | A | N |
| ATOM | 1110 | C | ASN | A | 261 | 249.151 | -65.638 | 106.361 | 1.00 | 38.95 | A | C |
| ATOM | 1111 | O | ASN | A | 261 | 249.142 | -65.652 | 105.149 | 1.00 | 40.40 | A | O |
| ATOM | 1112 | N | LEU | A | 262 | 248.245 | -64.953 | 107.046 | 1.00 | 42.51 | A | N |

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| ATOM | 1113 | CA | LEU | A | 262 | 247.197 | -64.169 | 106.386 | 1.00 | 42.29 | A | C |
| ATOM | 1114 | CB | LEU | A | 262 | 245.800 | -64.450 | 106.967 | 1.00 | 36.57 | A | C |
| ATOM | 1115 | CG | LEU | A | 262 | 245.209 | -65.819 | 106.657 | 1.00 | 37.41 | A | C |
| ATOM | 1116 | CD1 | LEU | A | 262 | 243.773 | -65.817 | 107.071 | 1.00 | 33.79 | A | C |
| ATOM | 1117 | CD2 | LEU | A | 262 | 245.324 | -66.152 | 105.193 | 1.00 | 39.29 | A | C |
| ATOM | 1118 | C | LEU | A | 262 | 247.548 | -62.703 | 106.582 | 1.00 | 41.70 | A | C |
| ATOM | 1119 | O | LEU | A | 262 | 247.543 | -62.205 | 107.717 | 1.00 | 44.29 | A | O |
| ATOM | 1120 | N | LEU | A | 263 | 247.857 | -62.021 | 105.473 | 1.00 | 38.70 | A | N |
| ATOM | 1121 | CA | LEU | A | 263 | 248.238 | -60.610 | 105.505 | 1.00 | 26.99 | A | C |
| ATOM | 1122 | CB | LEU | A | 263 | 249.475 | -60.392 | 104.679 | 1.00 | 36.05 | A | C |
| ATOM | 1123 | CG | LEU | A | 263 | 250.658 | -61.333 | 104.917 | 1.00 | 31.41 | A | C |
| ATOM | 1124 | CD1 | LEU | A | 263 | 251.820 | -60.991 | 103.978 | 1.00 | 33.22 | A | C |
| ATOM | 1125 | CD2 | LEU | A | 263 | 251.081 | -61.269 | 106.325 | 1.00 | 29.25 | A | C |
| ATOM | 1126 | C | LEU | A | 263 | 247.144 | -59.677 | 105.013 | 1.00 | 35.80 | A | C |
| ATOM | 1127 | O | LEU | A | 263 | 246.220 | -60.100 | 104.304 | 1.00 | 32.87 | A | O |
| ATOM | 1128 | N | LEU | A | 264 | 247.245 | -58.408 | 105.410 | 1.00 | 31.98 | A | N |
| ATOM | 1129 | CA | LEU | A | 264 | 246.246 | -57.428 | 105.041 | 1.00 | 33.35 | A | C |
| ATOM | 1130 | CB | LEU | A | 264 | 245.703 | -56.729 | 106.303 | 1.00 | 31.72 | A | C |
| ATOM | 1131 | CG | LEU | A | 264 | 244.971 | -57.619 | 107.303 | 1.00 | 28.92 | A | C |
| ATOM | 1132 | CD1 | LEU | A | 264 | 244.728 | -56.820 | 108.620 | 1.00 | 24.69 | A | C |
| ATOM | 1133 | CD2 | LEU | A | 264 | 243.644 | -58.095 | 106.660 | 1.00 | 26.84 | A | C |
| ATOM | 1134 | C | LEU | A | 264 | 246.884 | -56.419 | 104.110 | 1.00 | 35.86 | A | C |
| ATOM | 1135 | O | LEU | A | 264 | 247.974 | -55.944 | 104.368 | 1.00 | 40.12 | A | O |
| ATOM | 1136 | N | GLY | A | 265 | 246.188 | -56.100 | 103.026 | 1.00 | 36.89 | A | N |
| ATOM | 1137 | CA | GLY | A | 265 | 246.674 | -55.133 | 102.045 | 1.00 | 43.31 | A | C |
| ATOM | 1138 | C | GLY | A | 265 | 246.399 | -53.673 | 102.351 | 1.00 | 43.89 | A | C |
| ATOM | 1139 | O | GLY | A | 265 | 245.889 | -53.350 | 103.401 | 1.00 | 48.54 | A | O |
| ATOM | 1140 | N | SER | A | 266 | 246.742 | -52.796 | 101.422 | 1.00 | 48.23 | A | N |
| ATOM | 1141 | CA | SER | A | 266 | 246.567 | -51.364 | 101.591 | 1.00 | 49.09 | A | C |
| ATOM | 1142 | CB | SER | A | 266 | 246.936 | -50.647 | 100.304 | 1.00 | 51.41 | A | C |
| ATOM | 1143 | OG | SER | A | 266 | 246.057 | -51.012 | 99.237 | 1.00 | 64.31 | A | O |
| ATOM | 1144 | C | SER | A | 266 | 245.138 | -51.019 | 101.970 | 1.00 | 51.39 | A | C |
| ATOM | 1145 | O | SER | A | 266 | 244.915 | -50.247 | 102.883 | 1.00 | 54.83 | A | O |
| ATOM | 1146 | N | ALA | A | 267 | 244.162 | -51.588 | 101.271 | 1.00 | 54.20 | A | N |
| ATOM | 1147 | CA | ALA | A | 267 | 242.749 | -51.323 | 101.577 | 1.00 | 47.57 | A | C |
| ATOM | 1148 | CB | ALA | A | 267 | 241.921 | -51.394 | 100.320 | 1.00 | 47.18 | A | C |
| ATOM | 1149 | C | ALA | A | 267 | 242.203 | -52.330 | 102.595 | 1.00 | 48.50 | A | C |
| ATOM | 1150 | O | ALA | A | 267 | 241.010 | -52.582 | 102.620 | 1.00 | 50.25 | A | O |
| ATOM | 1151 | N | GLY | A | 268 | 243.084 | -52.913 | 103.410 | 1.00 | 45.91 | A | N |
| ATOM | 1152 | CA | GLY | A | 268 | 242.665 | -53.860 | 104.420 | 1.00 | 38.28 | A | C |
| ATOM | 1153 | C | GLY | A | 268 | 242.192 | -55.187 | 103.868 | 1.00 | 42.82 | A | C |
| ATOM | 1154 | O | GLY | A | 268 | 241.652 | -56.003 | 104.639 | 1.00 | 43.08 | A | O |
| ATOM | 1155 | N | GLU | A | 269 | 242.396 | -55.431 | 102.569 | 1.00 | 42.29 | A | N |
| ATOM | 1156 | CA | GLU | A | 269 | 241.958 | -56.697 | 101.992 | 1.00 | 40.12 | A | C |
| ATOM | 1157 | CB | GLU | A | 269 | 241.996 | -56.635 | 100.480 | 1.00 | 44.93 | A | C |
| ATOM | 1158 | CG | GLU | A | 269 | 243.430 | -56.655 | 99.871 | 1.00 | 51.34 | A | C |
| ATOM | 1159 | CD | GLU | A | 269 | 243.997 | -55.261 | 99.657 | 1.00 | 57.16 | A | C |
| ATOM | 1160 | OE1 | GLU | A | 269 | 244.081 | -54.491 | 100.642 | 1.00 | 51.07 | A | O |
| ATOM | 1161 | OE2 | GLU | A | 269 | 244.350 | -54.945 | 98.493 | 1.00 | 61.02 | A | O |
| ATOM | 1162 | C | GLU | A | 269 | 242.872 | -57.847 | 102.472 | 1.00 | 44.10 | A | C |
| ATOM | 1163 | O | GLU | A | 269 | 244.053 | -57.652 | 102.807 | 1.00 | 43.32 | A | O |
| ATOM | 1164 | N | LEU | A | 270 | 242.331 | -59.059 | 102.481 | 1.00 | 43.44 | A | N |
| ATOM | 1165 | CA | LEU | A | 270 | 243.076 | -60.228 | 102.927 | 1.00 | 44.15 | A | C |
| ATOM | 1166 | CB | LEU | A | 270 | 242.102 | -61.333 | 103.323 | 1.00 | 50.71 | A | C |
| ATOM | 1167 | CG | LEU | A | 270 | 242.624 | -62.428 | 104.232 | 1.00 | 53.26 | A | C |
| ATOM | 1168 | CD1 | LEU | A | 270 | 242.304 | -62.033 | 105.661 | 1.00 | 60.78 | A | C |
| ATOM | 1169 | CD2 | LEU | A | 270 | 241.999 | -63.736 | 103.906 | 1.00 | 50.44 | A | C |
| ATOM | 1170 | C | LEU | A | 270 | 243.985 | -60.731 | 101.813 | 1.00 | 44.35 | A | C |
| ATOM | 1171 | O | LEU | A | 270 | 243.728 | -60.526 | 100.635 | 1.00 | 49.43 | A | O |
| ATOM | 1172 | N | LYS | A | 271 | 245.063 | -61.398 | 102.188 | 1.00 | 40.19 | A | N |
| ATOM | 1173 | CA | LYS | A | 271 | 245.994 | -61.946 | 101.211 | 1.00 | 31.70 | A | C |
| ATOM | 1174 | CB | LYS | A | 271 | 247.028 | -60.897 | 100.819 | 1.00 | 32.47 | A | C |
| ATOM | 1175 | CG | LYS | A | 271 | 246.604 | -59.930 | 99.753 | 1.00 | 31.86 | A | C |
| ATOM | 1176 | CD | LYS | A | 271 | 247.492 | -58.692 | 99.731 | 1.00 | 35.87 | A | C |
| ATOM | 1177 | CE | LYS | A | 271 | 247.103 | -57.715 | 98.619 | 1.00 | 42.09 | A | C |
| ATOM | 1178 | NZ | LYS | A | 271 | 247.551 | -58.225 | 97.303 | 1.00 | 58.37 | A | N |
| ATOM | 1179 | C | LYS | A | 271 | 246.714 | -63.148 | 101.820 | 1.00 | 41.22 | A | C |
| ATOM | 1180 | O | LYS | A | 271 | 247.433 | -63.023 | 102.807 | 1.00 | 49.74 | A | O |
| ATOM | 1181 | N | ILE | A | 272 | 246.505 | -64.322 | 101.249 | 1.00 | 39.27 | A | N |
| ATOM | 1182 | CA | ILE | A | 272 | 247.155 | -65.524 | 101.741 | 1.00 | 34.76 | A | C |

| | | | | | | | | | | | | |
|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 1183 | CB | ILE | A | 272 | 246.491 | -66.758 | 101.150 | 1.00 | 44.34 | | |
| ATOM | 1184 | CG2 | ILE | A | 272 | 246.821 | -67.987 | 102.002 | 1.00 | 55.36 | A | C |
| ATOM | 1185 | CG1 | ILE | A | 272 | 244.973 | -66.577 | 101.161 | 1.00 | 50.03 | A | C |
| ATOM | 1186 | CD1 | ILE | A | 272 | 244.215 | -67.794 | 100.577 | 1.00 | 52.97 | A | C |
| ATOM | 1187 | C | ILE | A | 272 | 248.617 | -65.530 | 101.319 | 1.00 | 41.49 | A | C |
| ATOM | 1188 | O | ILE | A | 272 | 248.918 | -65.272 | 100.168 | 1.00 | 40.02 | A | O |
| ATOM | 1189 | N | ALA | A | 273 | 249.524 | -65.832 | 102.243 | 1.00 | 39.46 | A | N |
| ATOM | 1190 | CA | ALA | A | 273 | 250.936 | -65.861 | 101.931 | 1.00 | 38.71 | A | C |
| ATOM | 1191 | CB | ALA | A | 273 | 251.588 | -64.617 | 102.514 | 1.00 | 40.33 | A | C |
| ATOM | 1192 | C | ALA | A | 273 | 251.592 | -67.137 | 102.487 | 1.00 | 46.92 | A | C |
| ATOM | 1193 | O | ALA | A | 273 | 250.910 | -68.063 | 102.901 | 1.00 | 49.16 | A | O |
| ATOM | 1194 | N | ASP | A | 274 | 252.923 | -67.165 | 102.493 | 1.00 | 51.43 | A | N |
| ATOM | 1195 | CA | ASP | A | 274 | 253.703 | -68.293 | 102.997 | 1.00 | 51.40 | A | C |
| ATOM | 1196 | CB | ASP | A | 274 | 253.686 | -68.323 | 104.530 | 1.00 | 50.98 | A | C |
| ATOM | 1197 | CG | ASP | A | 274 | 254.601 | -69.361 | 105.083 | 1.00 | 42.10 | A | C |
| ATOM | 1198 | OD1 | ASP | A | 274 | 255.660 | -69.637 | 104.516 | 1.00 | 54.26 | A | O |
| ATOM | 1199 | OD2 | ASP | A | 274 | 254.299 | -69.914 | 106.121 | 1.00 | 52.11 | A | O |
| ATOM | 1200 | C | ASP | A | 274 | 253.224 | -69.618 | 102.433 | 1.00 | 51.38 | A | C |
| ATOM | 1201 | O | ASP | A | 274 | 252.572 | -70.382 | 103.133 | 1.00 | 53.85 | A | O |
| ATOM | 1202 | N | PHE | A | 275 | 253.540 | -69.863 | 101.159 | 1.00 | 53.60 | A | N |
| ATOM | 1203 | CA | PHE | A | 275 | 253.173 | -71.097 | 100.476 | 1.00 | 46.97 | A | C |
| ATOM | 1204 | CB | PHE | A | 275 | 252.975 | -70.871 | 98.973 | 1.00 | 42.90 | A | C |
| ATOM | 1205 | CG | PHE | A | 275 | 251.733 | -70.169 | 98.636 | 1.00 | 45.54 | A | C |
| ATOM | 1206 | CD1 | PHE | A | 275 | 251.527 | -68.830 | 99.048 | 1.00 | 45.75 | A | C |
| ATOM | 1207 | CD2 | PHE | A | 275 | 250.737 | -70.843 | 97.917 | 1.00 | 41.77 | A | C |
| ATOM | 1208 | CE1 | PHE | A | 275 | 250.305 | -68.152 | 98.737 | 1.00 | 48.01 | A | C |
| ATOM | 1209 | CE2 | PHE | A | 275 | 249.503 | -70.195 | 97.591 | 1.00 | 46.76 | A | C |
| ATOM | 1210 | CZ | PHE | A | 275 | 249.279 | -68.840 | 98.000 | 1.00 | 48.77 | A | C |
| ATOM | 1211 | C | PHE | A | 275 | 254.270 | -72.149 | 100.678 | 1.00 | 43.41 | A | C |
| ATOM | 1212 | O | PHE | A | 275 | 254.496 | -72.970 | 99.791 | 1.00 | 36.81 | A | O |
| ATOM | 1213 | N | GLY | A | 276 | 254.938 | -72.109 | 101.843 | 1.00 | 42.93 | A | N |
| ATOM | 1214 | CA | GLY | A | 276 | 255.969 | -73.079 | 102.214 | 1.00 | 37.83 | A | C |
| ATOM | 1215 | C | GLY | A | 276 | 255.471 | -74.522 | 102.210 | 1.00 | 35.71 | A | C |
| ATOM | 1216 | O | GLY | A | 276 | 256.197 | -75.412 | 101.834 | 1.00 | 45.98 | A | O |
| ATOM | 1217 | N | TRP | A | 277 | 254.227 | -74.768 | 102.608 | 1.00 | 40.57 | A | N |
| ATOM | 1218 | CA | TRP | A | 277 | 253.676 | -76.118 | 102.591 | 1.00 | 36.62 | A | C |
| ATOM | 1219 | CB | TRP | A | 277 | 252.882 | -76.378 | 103.859 | 1.00 | 42.09 | A | C |
| ATOM | 1220 | CG | TRP | A | 277 | 253.751 | -76.592 | 105.041 | 1.00 | 50.97 | A | C |
| ATOM | 1221 | CD2 | TRP | A | 277 | 254.089 | -77.854 | 105.629 | 1.00 | 58.62 | A | C |
| ATOM | 1222 | CE2 | TRP | A | 277 | 254.960 | -77.593 | 106.702 | 1.00 | 58.91 | A | C |
| ATOM | 1223 | CE3 | TRP | A | 277 | 253.726 | -79.182 | 105.360 | 1.00 | 59.93 | A | C |
| ATOM | 1224 | CD1 | TRP | A | 277 | 254.420 | -75.640 | 105.759 | 1.00 | 54.30 | A | C |
| ATOM | 1225 | NE1 | TRP | A | 277 | 255.150 | -76.235 | 106.758 | 1.00 | 59.86 | A | N |
| ATOM | 1226 | CZ2 | TRP | A | 277 | 255.482 | -78.610 | 107.501 | 1.00 | 61.19 | A | C |
| ATOM | 1227 | CZ3 | TRP | A | 277 | 254.244 | -80.188 | 106.162 | 1.00 | 61.29 | A | C |
| ATOM | 1228 | CH2 | TRP | A | 277 | 255.108 | -79.892 | 107.219 | 1.00 | 63.73 | A | C |
| ATOM | 1229 | C | TRP | A | 277 | 252.777 | -76.364 | 101.408 | 1.00 | 35.74 | A | C |
| ATOM | 1230 | O | TRP | A | 277 | 252.212 | -77.442 | 101.298 | 1.00 | 35.61 | A | O |
| ATOM | 1231 | N | SER | A | 278 | 252.636 | -75.372 | 100.528 | 1.00 | 44.94 | A | N |
| ATOM | 1232 | CA | SER | A | 278 | 251.779 | -75.474 | 99.336 | 1.00 | 46.77 | A | C |
| ATOM | 1233 | CB | SER | A | 278 | 251.916 | -74.202 | 98.517 | 1.00 | 42.80 | A | C |
| ATOM | 1234 | OG | SER | A | 278 | 250.880 | -74.139 | 97.565 | 1.00 | 54.88 | A | O |
| ATOM | 1235 | C | SER | A | 278 | 252.200 | -76.703 | 98.464 | 1.00 | 50.47 | A | C |
| ATOM | 1236 | O | SER | A | 278 | 253.367 | -77.084 | 98.378 | 1.00 | 54.17 | A | O |
| ATOM | 1237 | N | VAL | A | 279 | 251.246 | -77.347 | 97.819 | 1.00 | 51.50 | A | N |
| ATOM | 1238 | CA | VAL | A | 279 | 251.566 | -78.514 | 96.992 | 1.00 | 57.94 | A | C |
| ATOM | 1239 | CB | VAL | A | 279 | 251.588 | -79.780 | 97.847 | 1.00 | 44.98 | A | C |
| ATOM | 1240 | CG1 | VAL | A | 279 | 250.199 | -80.321 | 97.997 | 1.00 | 43.31 | A | C |
| ATOM | 1241 | CG2 | VAL | A | 279 | 252.491 | -80.787 | 97.178 | 1.00 | 57.04 | A | C |
| ATOM | 1242 | C | VAL | A | 279 | 250.626 | -78.680 | 95.765 | 1.00 | 59.15 | A | C |
| ATOM | 1243 | O | VAL | A | 279 | 249.430 | -78.387 | 95.867 | 1.00 | 67.05 | A | O |
| ATOM | 1244 | N | HIS | A | 280 | 251.204 | -79.094 | 94.615 | 1.00 | 63.81 | A | N |
| ATOM | 1245 | CA | HIS | A | 280 | 250.486 | -79.252 | 93.335 | 1.00 | 67.43 | A | C |
| ATOM | 1246 | CB | HIS | A | 280 | 251.439 | -79.066 | 92.122 | 1.00 | 66.79 | A | C |
| ATOM | 1247 | CG | HIS | A | 280 | 250.875 | -78.185 | 91.056 | 1.00 | 72.05 | A | C |
| ATOM | 1248 | CD2 | HIS | A | 280 | 250.729 | -78.371 | 89.721 | 1.00 | 75.11 | A | C |
| ATOM | 1249 | ND1 | HIS | A | 280 | 250.404 | -76.921 | 91.326 | 1.00 | 73.34 | A | N |
| ATOM | 1250 | CE1 | HIS | A | 280 | 249.997 | -76.358 | 90.201 | 1.00 | 80.03 | A | C |
| ATOM | 1251 | NE2 | HIS | A | 280 | 250.185 | -77.217 | 89.213 | 1.00 | 83.14 | A | N |
| ATOM | 1252 | C | HIS | A | 280 | 249.968 | -80.672 | 93.390 | 1.00 | 70.50 | A | C |

| | | | | | | | | | | | | |
|------|------|-----|-----|---|-----|---------|---------|---------|------|--------|---|---|
| ATOM | 1253 | O | HIS | A | 280 | 250.581 | -81.589 | 92.745 | 1.00 | 82.51 | A | O |
| ATOM | 1254 | N | ALA | A | 281 | 248.772 | -80.853 | 93.985 | 1.00 | 68.02 | A | N |
| ATOM | 1255 | CA | ALA | A | 281 | 248.427 | -82.260 | 94.196 | 1.00 | 68.33 | A | C |
| ATOM | 1256 | CB | ALA | A | 281 | 249.603 | -82.885 | 94.806 | 1.00 | 60.98 | A | C |
| ATOM | 1257 | C | ALA | A | 281 | 247.205 | -82.754 | 95.016 | 1.00 | 68.64 | A | C |
| ATOM | 1258 | O | ALA | A | 281 | 246.292 | -82.032 | 95.339 | 1.00 | 67.99 | A | O |
| ATOM | 1259 | N | PRO | A | 282 | 247.225 | -84.034 | 95.373 | 1.00 | 70.43 | A | N |
| ATOM | 1260 | CD | PRO | A | 282 | 246.861 | -84.236 | 93.943 | 1.00 | 64.78 | A | C |
| ATOM | 1261 | CA | PRO | A | 282 | 246.609 | -85.171 | 96.058 | 1.00 | 67.06 | A | C |
| ATOM | 1262 | CB | PRO | A | 282 | 246.654 | -86.295 | 95.053 | 1.00 | 67.65 | A | C |
| ATOM | 1263 | CG | PRO | A | 282 | 246.201 | -85.826 | 93.934 | 1.00 | 63.34 | A | C |
| ATOM | 1264 | C | PRO | A | 282 | 247.893 | -85.384 | 96.902 | 1.00 | 69.62 | A | C |
| ATOM | 1265 | O | PRO | A | 282 | 248.995 | -85.628 | 96.346 | 1.00 | 80.00 | A | O |
| ATOM | 1266 | N | SER | A | 283 | 247.878 | -85.322 | 98.204 | 1.00 | 65.02 | A | N |
| ATOM | 1267 | CA | SER | A | 283 | 249.163 | -85.680 | 98.758 | 1.00 | 59.53 | A | C |
| ATOM | 1268 | CB | SER | A | 283 | 250.127 | -84.498 | 98.799 | 1.00 | 55.46 | A | C |
| ATOM | 1269 | OG | SER | A | 283 | 250.750 | -84.456 | 100.075 | 1.00 | 55.84 | A | O |
| ATOM | 1270 | C | SER | A | 283 | 249.259 | -86.394 | 100.033 | 1.00 | 55.99 | A | C |
| ATOM | 1271 | O | SER | A | 283 | 248.283 | -86.609 | 100.713 | 1.00 | 69.93 | A | O |
| ATOM | 1272 | N | SER | A | 284 | 250.462 | -86.835 | 100.323 | 1.00 | 60.56 | A | N |
| ATOM | 1273 | CA | SER | A | 284 | 250.699 | -87.467 | 101.588 | 1.00 | 63.49 | A | C |
| ATOM | 1274 | CB | SER | A | 284 | 251.416 | -88.808 | 101.438 | 1.00 | 63.76 | A | C |
| ATOM | 1275 | OG | SER | A | 284 | 252.588 | -88.697 | 100.633 | 1.00 | 77.24 | A | O |
| ATOM | 1276 | C | SER | A | 284 | 251.609 | -86.432 | 102.280 | 1.00 | 63.54 | A | C |
| ATOM | 1277 | O | SER | A | 284 | 251.934 | -85.336 | 101.744 | 1.00 | 57.98 | A | O |
| ATOM | 1278 | N | ARG | A | 285 | 251.999 | -86.775 | 103.492 | 1.00 | 64.16 | A | N |
| ATOM | 1279 | CA | ARG | A | 285 | 252.823 | -85.889 | 104.282 | 1.00 | 67.66 | A | C |
| ATOM | 1280 | CB | ARG | A | 285 | 252.738 | -86.301 | 105.734 | 1.00 | 62.91 | A | C |
| ATOM | 1281 | C | ARG | A | 285 | 254.278 | -85.923 | 103.806 | 1.00 | 68.61 | A | C |
| ATOM | 1282 | O | ARG | A | 285 | 254.612 | -86.645 | 102.888 | 1.00 | 72.84 | A | O |
| ATOM | 1283 | N | ARG | A | 286 | 255.135 | -85.146 | 104.466 | 1.00 | 71.24 | A | N |
| ATOM | 1284 | CA | ARG | A | 286 | 256.561 | -85.059 | 104.163 | 1.00 | 75.06 | A | C |
| ATOM | 1285 | CB | ARG | A | 286 | 256.943 | -83.563 | 104.008 | 1.00 | 73.44 | A | C |
| ATOM | 1286 | CG | ARG | A | 286 | 255.881 | -82.698 | 103.382 | 1.00 | 71.75 | A | C |
| ATOM | 1287 | CD | ARG | A | 286 | 255.139 | -83.449 | 102.361 | 1.00 | 72.37 | A | C |
| ATOM | 1288 | NE | ARG | A | 286 | 255.481 | -82.999 | 101.030 | 1.00 | 72.92 | A | N |
| ATOM | 1289 | CZ | ARG | A | 286 | 254.690 | -83.207 | 99.989 | 1.00 | 77.01 | A | C |
| ATOM | 1290 | NH1 | ARG | A | 286 | 253.537 | -83.858 | 100.174 | 1.00 | 80.80 | A | N |
| ATOM | 1291 | NH2 | ARG | A | 286 | 255.024 | -82.753 | 98.778 | 1.00 | 73.00 | A | N |
| ATOM | 1292 | C | ARG | A | 286 | 257.251 | -85.649 | 105.339 | 1.00 | 79.18 | A | C |
| ATOM | 1293 | O | ARG | A | 286 | 258.525 | -85.258 | 105.556 | 1.00 | 80.60 | A | O |
| ATOM | 1294 | N | TPO | A | 287 | 256.458 | -86.471 | 106.097 | 1.00 | 82.59 | A | N |
| ATOM | 1295 | CA | TPO | A | 287 | 256.848 | -87.091 | 107.376 | 1.00 | 81.36 | A | C |
| ATOM | 1296 | CB | TPO | A | 287 | 258.340 | -87.583 | 107.506 | 1.00 | 85.77 | A | C |
| ATOM | 1297 | CG2 | TPO | A | 287 | 258.788 | -88.436 | 108.791 | 1.00 | 78.62 | A | C |
| ATOM | 1298 | OG1 | TPO | A | 287 | 259.242 | -87.965 | 106.406 | 1.00 | 96.25 | A | O |
| ATOM | 1299 | P | TPO | A | 287 | 259.671 | -89.537 | 105.840 | 1.00 | 94.10 | A | P |
| ATOM | 1300 | O1P | TPO | A | 287 | 261.195 | -89.889 | 106.372 | 1.00 | 105.80 | A | O |
| ATOM | 1301 | O2P | TPO | A | 287 | 259.793 | -89.485 | 104.142 | 1.00 | 103.14 | A | O |
| ATOM | 1302 | O3P | TPO | A | 287 | 258.773 | -90.552 | 106.786 | 1.00 | 103.19 | A | O |
| ATOM | 1303 | C | TPO | A | 287 | 257.020 | -86.093 | 108.560 | 1.00 | 84.40 | A | C |
| ATOM | 1304 | O | TPO | A | 287 | 256.708 | -86.453 | 109.760 | 1.00 | 82.15 | A | O |
| ATOM | 1305 | N | TPO | A | 288 | 257.164 | -84.776 | 108.357 | 1.00 | 86.52 | A | N |
| ATOM | 1306 | CA | TPO | A | 288 | 257.256 | -84.113 | 109.592 | 1.00 | 85.55 | A | C |
| ATOM | 1307 | CB | TPO | A | 288 | 258.562 | -83.387 | 109.678 | 1.00 | 87.59 | A | C |
| ATOM | 1308 | CG2 | TPO | A | 288 | 259.265 | -83.063 | 111.066 | 1.00 | 82.26 | A | C |
| ATOM | 1309 | OG1 | TPO | A | 288 | 259.687 | -83.759 | 108.739 | 1.00 | 93.55 | A | O |
| ATOM | 1310 | P | TPO | A | 288 | 261.048 | -84.822 | 108.978 | 1.00 | 87.77 | A | P |
| ATOM | 1311 | O1P | TPO | A | 288 | 262.388 | -83.892 | 109.216 | 1.00 | 91.79 | A | O |
| ATOM | 1312 | O2P | TPO | A | 288 | 261.352 | -85.656 | 107.542 | 1.00 | 93.35 | A | O |
| ATOM | 1313 | O3P | TPO | A | 288 | 260.797 | -85.456 | 110.481 | 1.00 | 95.16 | A | O |
| ATOM | 1314 | C | TPO | A | 288 | 256.287 | -82.985 | 109.892 | 1.00 | 89.28 | A | C |
| ATOM | 1315 | O | TPO | A | 288 | 255.311 | -82.594 | 109.048 | 1.00 | 86.14 | A | O |
| ATOM | 1316 | N | LEU | A | 289 | 256.536 | -82.411 | 111.055 | 1.00 | 87.01 | A | N |
| ATOM | 1317 | CA | LEU | A | 289 | 255.511 | -81.523 | 111.435 | 1.00 | 88.25 | A | C |
| ATOM | 1318 | CB | LEU | A | 289 | 254.346 | -82.345 | 111.883 | 1.00 | 78.91 | A | C |
| ATOM | 1319 | C | LEU | A | 289 | 255.852 | -80.565 | 112.436 | 1.00 | 87.34 | A | C |
| ATOM | 1320 | O | LEU | A | 289 | 256.026 | -80.894 | 113.634 | 1.00 | 90.27 | A | O |
| ATOM | 1321 | N | CYS | A | 290 | 256.101 | -79.389 | 111.914 | 1.00 | 89.51 | A | N |
| ATOM | 1322 | CA | CYS | A | 290 | 256.347 | -78.354 | 112.824 | 1.00 | 89.73 | A | C |

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|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 1323 | CB | CYS | A | 290 | 257.299 | -77.405 | 112.324 | 1.00 | 80.05 | A | C |
| ATOM | 1324 | C | CYS | A | 290 | 254.931 | -77.891 | 112.490 | 1.00 | 90.22 | A | C |
| ATOM | 1325 | O | CYS | A | 290 | 254.405 | -77.933 | 111.292 | 1.00 | 91.11 | A | O |
| ATOM | 1326 | N | GLY | A | 291 | 254.262 | -77.496 | 113.541 | 1.00 | 90.88 | A | N |
| ATOM | 1327 | CA | GLY | A | 291 | 252.946 | -77.026 | 113.294 | 1.00 | 84.36 | A | C |
| ATOM | 1328 | C | GLY | A | 291 | 252.214 | -77.175 | 114.559 | 1.00 | 80.67 | A | C |
| ATOM | 1329 | O | GLY | A | 291 | 252.395 | -78.093 | 115.381 | 1.00 | 72.19 | A | O |
| ATOM | 1330 | N | THR | A | 292 | 251.411 | -76.152 | 114.668 | 1.00 | 72.87 | A | N |
| ATOM | 1331 | CA | THR | A | 292 | 250.543 | -75.923 | 115.732 | 1.00 | 68.66 | A | C |
| ATOM | 1332 | CB | THR | A | 292 | 250.229 | -74.450 | 115.788 | 1.00 | 64.26 | A | C |
| ATOM | 1333 | OG1 | THR | A | 292 | 249.385 | -74.238 | 116.907 | 1.00 | 62.83 | A | O |
| ATOM | 1334 | CG2 | THR | A | 292 | 249.511 | -73.967 | 114.478 | 1.00 | 66.76 | A | C |
| ATOM | 1335 | C | THR | A | 292 | 249.401 | -76.698 | 115.093 | 1.00 | 69.67 | A | C |
| ATOM | 1336 | O | THR | A | 292 | 248.736 | -76.230 | 114.162 | 1.00 | 81.32 | A | O |
| ATOM | 1337 | N | LEU | A | 293 | 249.162 | -77.905 | 115.545 | 1.00 | 65.76 | A | N |
| ATOM | 1338 | CA | LEU | A | 293 | 248.076 | -78.633 | 114.929 | 1.00 | 57.85 | A | C |
| ATOM | 1339 | CB | LEU | A | 293 | 247.775 | -79.863 | 115.741 | 1.00 | 58.26 | A | C |
| ATOM | 1340 | CG | LEU | A | 293 | 249.007 | -80.649 | 116.175 | 1.00 | 59.75 | A | C |
| ATOM | 1341 | CD1 | LEU | A | 293 | 248.607 | -81.606 | 117.246 | 1.00 | 56.85 | A | C |
| ATOM | 1342 | CD2 | LEU | A | 293 | 249.618 | -81.397 | 114.982 | 1.00 | 55.33 | A | C |
| ATOM | 1343 | C | LEU | A | 293 | 246.812 | -77.819 | 114.737 | 1.00 | 54.37 | A | C |
| ATOM | 1344 | O | LEU | A | 293 | 246.215 | -77.930 | 113.686 | 1.00 | 59.11 | A | O |
| ATOM | 1345 | N | ASP | A | 294 | 246.467 | -76.947 | 115.687 | 1.00 | 45.72 | A | N |
| ATOM | 1346 | CA | ASP | A | 294 | 245.241 | -76.166 | 115.622 | 1.00 | 46.04 | A | C |
| ATOM | 1347 | CB | ASP | A | 294 | 245.471 | -74.762 | 116.195 | 1.00 | 47.18 | A | C |
| ATOM | 1348 | CG | ASP | A | 294 | 245.754 | -74.782 | 117.713 | 1.00 | 53.87 | A | C |
| ATOM | 1349 | OD1 | ASP | A | 294 | 244.938 | -75.399 | 118.452 | 1.00 | 53.07 | A | O |
| ATOM | 1350 | OD2 | ASP | A | 294 | 246.772 | -74.166 | 118.153 | 1.00 | 44.18 | A | O |
| ATOM | 1351 | C | ASP | A | 294 | 244.490 | -76.064 | 114.323 | 1.00 | 42.63 | A | C |
| ATOM | 1352 | O | ASP | A | 294 | 243.322 | -76.434 | 114.275 | 1.00 | 40.46 | A | O |
| ATOM | 1353 | N | TYR | A | 295 | 245.168 | -75.589 | 113.280 | 1.00 | 41.51 | A | N |
| ATOM | 1354 | CA | TYR | A | 295 | 244.534 | -75.404 | 111.983 | 1.00 | 42.29 | A | C |
| ATOM | 1355 | CB | TYR | A | 295 | 245.046 | -74.116 | 111.335 | 1.00 | 42.13 | A | C |
| ATOM | 1356 | CG | TYR | A | 295 | 245.120 | -72.945 | 112.263 | 1.00 | 41.89 | A | C |
| ATOM | 1357 | CD1 | TYR | A | 295 | 246.211 | -72.793 | 113.099 | 1.00 | 47.14 | A | C |
| ATOM | 1358 | CE1 | TYR | A | 295 | 246.304 | -71.731 | 113.973 | 1.00 | 47.33 | A | C |
| ATOM | 1359 | CD2 | TYR | A | 295 | 244.117 | -71.995 | 112.309 | 1.00 | 36.13 | A | C |
| ATOM | 1360 | CE2 | TYR | A | 295 | 244.212 | -70.914 | 113.162 | 1.00 | 43.23 | A | C |
| ATOM | 1361 | CZ | TYR | A | 295 | 245.302 | -70.785 | 113.996 | 1.00 | 47.19 | A | C |
| ATOM | 1362 | OH | TYR | A | 295 | 245.414 | -69.690 | 114.838 | 1.00 | 57.32 | A | O |
| ATOM | 1363 | C | TYR | A | 295 | 244.655 | -76.563 | 110.985 | 1.00 | 41.49 | A | C |
| ATOM | 1364 | O | TYR | A | 295 | 244.224 | -76.467 | 109.822 | 1.00 | 43.26 | A | O |
| ATOM | 1365 | N | LEU | A | 296 | 245.228 | -77.668 | 111.448 | 1.00 | 39.99 | A | N |
| ATOM | 1366 | CA | LEU | A | 296 | 245.411 | -78.868 | 110.607 | 1.00 | 51.39 | A | C |
| ATOM | 1367 | CB | LEU | A | 296 | 246.671 | -79.611 | 111.016 | 1.00 | 53.81 | A | C |
| ATOM | 1368 | CG | LEU | A | 296 | 248.033 | -78.987 | 110.652 | 1.00 | 57.41 | A | C |
| ATOM | 1369 | CD1 | LEU | A | 296 | 249.165 | -79.934 | 111.025 | 1.00 | 51.84 | A | C |
| ATOM | 1370 | CD2 | LEU | A | 296 | 248.040 | -78.694 | 109.161 | 1.00 | 50.59 | A | C |
| ATOM | 1371 | C | LEU | A | 296 | 244.205 | -79.803 | 110.651 | 1.00 | 48.90 | A | C |
| ATOM | 1372 | O | LEU | A | 296 | 243.511 | -79.890 | 111.645 | 1.00 | 60.00 | A | O |
| ATOM | 1373 | N | PRO | A | 297 | 243.914 | -80.480 | 109.550 | 1.00 | 49.64 | A | N |
| ATOM | 1374 | CD | PRO | A | 297 | 244.428 | -80.152 | 108.220 | 1.00 | 48.93 | A | C |
| ATOM | 1375 | CA | PRO | A | 297 | 242.782 | -81.390 | 109.447 | 1.00 | 53.31 | A | C |
| ATOM | 1376 | CB | PRO | A | 297 | 242.450 | -81.327 | 107.951 | 1.00 | 50.04 | A | C |
| ATOM | 1377 | CG | PRO | A | 297 | 243.782 | -81.194 | 107.367 | 1.00 | 48.93 | A | C |
| ATOM | 1378 | C | PRO | A | 297 | 243.137 | -82.762 | 109.966 | 1.00 | 57.23 | A | C |
| ATOM | 1379 | O | PRO | A | 297 | 244.303 | -83.109 | 110.051 | 1.00 | 56.18 | A | O |
| ATOM | 1380 | N | PRO | A | 298 | 242.135 | -83.562 | 110.334 | 1.00 | 59.72 | A | N |
| ATOM | 1381 | CD | PRO | A | 298 | 240.704 | -83.237 | 110.308 | 1.00 | 64.33 | A | C |
| ATOM | 1382 | CA | PRO | A | 298 | 242.340 | -84.917 | 110.853 | 1.00 | 62.61 | A | C |
| ATOM | 1383 | CB | PRO | A | 298 | 240.929 | -85.463 | 110.920 | 1.00 | 65.22 | A | C |
| ATOM | 1384 | CG | PRO | A | 298 | 240.143 | -84.267 | 111.288 | 1.00 | 64.88 | A | C |
| ATOM | 1385 | C | PRO | A | 298 | 243.245 | -85.779 | 109.963 | 1.00 | 64.63 | A | C |
| ATOM | 1386 | O | PRO | A | 298 | 244.184 | -86.426 | 110.459 | 1.00 | 56.23 | A | O |
| ATOM | 1387 | N | GLU | A | 299 | 242.975 | -85.781 | 108.656 | 1.00 | 60.03 | A | N |
| ATOM | 1388 | CA | GLU | A | 299 | 243.778 | -86.574 | 107.711 | 1.00 | 58.56 | A | C |
| ATOM | 1389 | CB | GLU | A | 299 | 243.303 | -86.339 | 106.265 | 1.00 | 57.01 | A | C |
| ATOM | 1390 | CG | GLU | A | 299 | 243.028 | -84.864 | 105.914 | 1.00 | 52.94 | A | C |
| ATOM | 1391 | CD | GLU | A | 299 | 241.596 | -84.474 | 106.109 | 1.00 | 48.80 | A | C |
| ATOM | 1392 | OE1 | GLU | A | 299 | 241.003 | -84.897 | 107.126 | 1.00 | 47.74 | A | O |

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|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 1393 | OE2 | GLU | A | 299 | 241.075 | -83.733 | 105.248 | 1.00 | 48.97 | A | O |
| ATOM | 1394 | C | GLU | A | 299 | 245.279 | -86.287 | 107.819 | 1.00 | 62.41 | A | C |
| ATOM | 1395 | O | GLU | A | 299 | 246.094 | -87.208 | 108.002 | 1.00 | 64.05 | A | O |
| ATOM | 1396 | N | MET | A | 300 | 245.648 | -85.014 | 107.709 | 1.00 | 63.79 | A | N |
| ATOM | 1397 | CA | MET | A | 300 | 247.051 | -84.637 | 107.816 | 1.00 | 63.71 | A | C |
| ATOM | 1398 | CB | MET | A | 300 | 247.225 | -83.145 | 107.597 | 1.00 | 67.63 | A | C |
| ATOM | 1399 | CG | MET | A | 300 | 247.374 | -82.763 | 106.145 | 1.00 | 66.70 | A | C |
| ATOM | 1400 | SD | MET | A | 300 | 248.052 | -81.127 | 106.017 | 1.00 | 71.20 | A | S |
| ATOM | 1401 | CE | MET | A | 300 | 249.750 | -81.388 | 106.380 | 1.00 | 69.10 | A | C |
| ATOM | 1402 | C | MET | A | 300 | 247.661 | -85.000 | 109.174 | 1.00 | 66.02 | A | C |
| ATOM | 1403 | O | MET | A | 300 | 248.702 | -85.664 | 109.256 | 1.00 | 70.05 | A | O |
| ATOM | 1404 | N | ILE | A | 301 | 247.025 | -84.550 | 110.244 | 1.00 | 67.53 | A | N |
| ATOM | 1405 | CA | ILE | A | 301 | 247.504 | -84.829 | 111.596 | 1.00 | 68.63 | A | C |
| ATOM | 1406 | CB | ILE | A | 301 | 246.490 | -84.278 | 112.606 | 1.00 | 67.77 | A | C |
| ATOM | 1407 | CG2 | ILE | A | 301 | 246.782 | -84.750 | 113.995 | 1.00 | 61.97 | A | C |
| ATOM | 1408 | CG1 | ILE | A | 301 | 246.505 | -82.750 | 112.495 | 1.00 | 67.98 | A | C |
| ATOM | 1409 | CD1 | ILE | A | 301 | 245.392 | -82.041 | 113.240 | 1.00 | 76.63 | A | C |
| ATOM | 1410 | C | ILE | A | 301 | 247.769 | -86.319 | 111.812 | 1.00 | 73.57 | A | C |
| ATOM | 1411 | O | ILE | A | 301 | 248.662 | -86.676 | 112.588 | 1.00 | 78.37 | A | O |
| ATOM | 1412 | N | GLU | A | 302 | 247.034 | -87.184 | 111.092 | 1.00 | 75.18 | A | N |
| ATOM | 1413 | CA | GLU | A | 302 | 247.212 | -88.639 | 111.215 | 1.00 | 74.73 | A | C |
| ATOM | 1414 | CB | GLU | A | 302 | 245.845 | -89.306 | 111.428 | 1.00 | 70.49 | A | C |
| ATOM | 1415 | CG | GLU | A | 302 | 245.378 | -89.254 | 112.936 | 1.00 | 78.38 | A | C |
| ATOM | 1416 | CD | GLU | A | 302 | 243.861 | -89.396 | 113.127 | 1.00 | 79.55 | A | C |
| ATOM | 1417 | OE1 | GLU | A | 302 | 243.188 | -90.062 | 112.281 | 1.00 | 80.35 | A | O |
| ATOM | 1418 | OE2 | GLU | A | 302 | 243.360 | -88.836 | 114.140 | 1.00 | 87.62 | A | O |
| ATOM | 1419 | C | GLU | A | 302 | 248.026 | -89.290 | 110.065 | 1.00 | 75.98 | A | C |
| ATOM | 1420 | O | GLU | A | 302 | 248.411 | -90.458 | 110.160 | 1.00 | 81.76 | A | O |
| ATOM | 1421 | N | GLY | A | 303 | 248.339 | -88.531 | 109.006 | 1.00 | 78.40 | A | N |
| ATOM | 1422 | CA | GLY | A | 303 | 249.160 | -89.053 | 107.912 | 1.00 | 72.91 | A | C |
| ATOM | 1423 | C | GLY | A | 303 | 248.566 | -89.374 | 106.552 | 1.00 | 72.79 | A | C |
| ATOM | 1424 | O | GLY | A | 303 | 249.237 | -89.368 | 105.513 | 1.00 | 76.85 | A | O |
| ATOM | 1425 | N | ARG | A | 304 | 247.286 | -89.679 | 106.549 | 1.00 | 67.34 | A | N |
| ATOM | 1426 | CA | ARG | A | 304 | 246.623 | -90.043 | 105.300 | 1.00 | 63.57 | A | C |
| ATOM | 1427 | CB | ARG | A | 304 | 245.098 | -90.120 | 105.461 | 1.00 | 62.11 | A | C |
| ATOM | 1428 | CG | ARG | A | 304 | 244.623 | -91.200 | 106.414 | 1.00 | 63.49 | A | C |
| ATOM | 1429 | CD | ARG | A | 304 | 243.198 | -90.950 | 106.857 | 1.00 | 70.18 | A | C |
| ATOM | 1430 | NE | ARG | A | 304 | 243.087 | -89.787 | 107.759 | 1.00 | 79.24 | A | N |
| ATOM | 1431 | CZ | ARG | A | 304 | 242.896 | -89.857 | 109.080 | 1.00 | 78.33 | A | C |
| ATOM | 1432 | NH1 | ARG | A | 304 | 242.788 | -91.031 | 109.665 | 1.00 | 78.68 | A | N |
| ATOM | 1433 | NH2 | ARG | A | 304 | 242.819 | -88.757 | 109.821 | 1.00 | 83.87 | A | N |
| ATOM | 1434 | C | ARG | A | 304 | 246.882 | -89.200 | 104.087 | 1.00 | 60.49 | A | C |
| ATOM | 1435 | O | ARG | A | 304 | 247.550 | -88.195 | 104.122 | 1.00 | 65.51 | A | O |
| ATOM | 1436 | N | MET | A | 305 | 246.278 | -89.661 | 103.013 | 1.00 | 61.50 | A | N |
| ATOM | 1437 | CA | MET | A | 305 | 246.335 | -89.084 | 101.698 | 1.00 | 65.46 | A | C |
| ATOM | 1438 | CB | MET | A | 305 | 246.041 | -90.197 | 100.663 | 1.00 | 63.39 | A | C |
| ATOM | 1439 | C | MET | A | 305 | 245.233 | -88.042 | 101.699 | 1.00 | 69.37 | A | C |
| ATOM | 1440 | O | MET | A | 305 | 244.036 | -88.349 | 101.691 | 1.00 | 78.96 | A | O |
| ATOM | 1441 | N | HIS | A | 306 | 245.671 | -86.802 | 101.710 | 1.00 | 69.56 | A | N |
| ATOM | 1442 | CA | HIS | A | 306 | 244.790 | -85.674 | 101.706 | 1.00 | 64.25 | A | C |
| ATOM | 1443 | CB | HIS | A | 306 | 245.247 | -84.657 | 102.735 | 1.00 | 64.47 | A | C |
| ATOM | 1444 | CG | HIS | A | 306 | 246.674 | -84.276 | 102.611 | 1.00 | 58.72 | A | C |
| ATOM | 1445 | CD2 | HIS | A | 306 | 247.253 | -83.167 | 102.099 | 1.00 | 56.35 | A | C |
| ATOM | 1446 | ND1 | HIS | A | 306 | 247.691 | -85.072 | 103.092 | 1.00 | 58.38 | A | N |
| ATOM | 1447 | CE1 | HIS | A | 306 | 248.841 | -84.461 | 102.883 | 1.00 | 55.77 | A | C |
| ATOM | 1448 | NE2 | HIS | A | 306 | 248.602 | -83.307 | 102.284 | 1.00 | 54.24 | A | N |
| ATOM | 1449 | C | HIS | A | 306 | 244.657 | -85.001 | 100.363 | 1.00 | 64.13 | A | C |
| ATOM | 1450 | O | HIS | A | 306 | 245.469 | -85.186 | 99.467 | 1.00 | 61.51 | A | O |
| ATOM | 1451 | N | ASP | A | 307 | 243.667 | -84.122 | 100.305 | 1.00 | 66.29 | A | N |
| ATOM | 1452 | CA | ASP | A | 307 | 243.316 | -83.353 | 99.117 | 1.00 | 67.53 | A | C |
| ATOM | 1453 | CB | ASP | A | 307 | 241.988 | -83.886 | 98.618 | 1.00 | 76.36 | A | C |
| ATOM | 1454 | CG | ASP | A | 307 | 241.022 | -84.130 | 99.789 | 1.00 | 82.91 | A | C |
| ATOM | 1455 | OD1 | ASP | A | 307 | 240.938 | -83.232 | 100.665 | 1.00 | 87.78 | A | O |
| ATOM | 1456 | OD2 | ASP | A | 307 | 240.376 | -85.208 | 99.863 | 1.00 | 84.54 | A | O |
| ATOM | 1457 | C | ASP | A | 307 | 243.130 | -81.873 | 99.495 | 1.00 | 62.06 | A | C |
| ATOM | 1458 | O | ASP | A | 307 | 243.430 | -81.435 | 100.603 | 1.00 | 62.07 | A | O |
| ATOM | 1459 | N | GLU | A | 308 | 242.537 | -81.150 | 98.566 | 1.00 | 56.29 | A | N |
| ATOM | 1460 | CA | GLU | A | 308 | 242.256 | -79.740 | 98.709 | 1.00 | 59.89 | A | C |
| ATOM | 1461 | CB | GLU | A | 308 | 241.830 | -79.236 | 97.325 | 1.00 | 58.22 | A | C |
| ATOM | 1462 | CG | GLU | A | 308 | 241.947 | -80.428 | 96.353 | 1.00 | 63.76 | A | C |

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|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 1463 | CD | GLU | A | 308 | 241.729 | -80.087 | 94.898 | 1.00 | 66.66 | A | C |
| ATOM | 1464 | OE1 | GLU | A | 308 | 242.570 | -79.367 | 94.305 | 1.00 | 69.11 | A | O |
| ATOM | 1465 | OE2 | GLU | A | 308 | 240.722 | -80.565 | 94.330 | 1.00 | 69.49 | A | O |
| ATOM | 1466 | C | GLU | A | 308 | 241.201 | -79.444 | 99.802 | 1.00 | 56.96 | A | C |
| ATOM | 1467 | O | GLU | A | 308 | 241.003 | -78.286 | 100.226 | 1.00 | 57.79 | A | O |
| ATOM | 1468 | N | LYS | A | 309 | 240.558 | -80.495 | 100.296 | 1.00 | 54.61 | A | N |
| ATOM | 1469 | CA | LYS | A | 309 | 239.526 | -80.332 | 101.317 | 1.00 | 54.70 | A | C |
| ATOM | 1470 | CB | LYS | A | 309 | 238.697 | -81.615 | 101.449 | 1.00 | 46.40 | A | C |
| ATOM | 1471 | CG | LYS | A | 309 | 237.740 | -81.859 | 100.300 | 1.00 | 53.44 | A | C |
| ATOM | 1472 | CD | LYS | A | 309 | 236.674 | -80.778 | 100.253 | 1.00 | 58.61 | A | C |
| ATOM | 1473 | CE | LYS | A | 309 | 235.600 | -81.071 | 99.214 | 1.00 | 60.43 | A | C |
| ATOM | 1474 | NZ | LYS | A | 309 | 234.524 | -80.026 | 99.209 | 1.00 | 60.76 | A | N |
| ATOM | 1475 | C | LYS | A | 309 | 240.111 | -79.967 | 102.668 | 1.00 | 54.64 | A | C |
| ATOM | 1476 | O | LYS | A | 309 | 239.366 | -79.724 | 103.618 | 1.00 | 66.35 | A | O |
| ATOM | 1477 | N | VAL | A | 310 | 241.439 | -79.941 | 102.770 | 1.00 | 57.91 | A | N |
| ATOM | 1478 | CA | VAL | A | 310 | 242.086 | -79.593 | 104.039 | 1.00 | 53.66 | A | C |
| ATOM | 1479 | CB | VAL | A | 310 | 243.573 | -79.974 | 104.058 | 1.00 | 52.18 | A | C |
| ATOM | 1480 | CG1 | VAL | A | 310 | 243.749 | -81.375 | 103.528 | 1.00 | 54.98 | A | C |
| ATOM | 1481 | CG2 | VAL | A | 310 | 244.347 | -79.010 | 103.252 | 1.00 | 55.72 | A | C |
| ATOM | 1482 | C | VAL | A | 310 | 241.957 | -78.091 | 104.263 | 1.00 | 53.64 | A | C |
| ATOM | 1483 | O | VAL | A | 310 | 241.771 | -77.638 | 105.404 | 1.00 | 47.54 | A | O |
| ATOM | 1484 | N | ASP | A | 311 | 242.008 | -77.332 | 103.168 | 1.00 | 50.01 | A | N |
| ATOM | 1485 | CA | ASP | A | 311 | 241.881 | -75.889 | 103.255 | 1.00 | 57.45 | A | C |
| ATOM | 1486 | CB | ASP | A | 311 | 242.275 | -75.232 | 101.925 | 1.00 | 56.10 | A | C |
| ATOM | 1487 | CG | ASP | A | 311 | 243.756 | -75.367 | 101.624 | 1.00 | 55.84 | A | C |
| ATOM | 1488 | OD1 | ASP | A | 311 | 244.585 | -75.238 | 102.553 | 1.00 | 49.03 | A | O |
| ATOM | 1489 | OD2 | ASP | A | 311 | 244.085 | -75.597 | 100.453 | 1.00 | 54.46 | A | O |
| ATOM | 1490 | C | ASP | A | 311 | 240.454 | -75.467 | 103.667 | 1.00 | 59.07 | A | C |
| ATOM | 1491 | O | ASP | A | 311 | 240.258 | -74.365 | 104.208 | 1.00 | 69.75 | A | O |
| ATOM | 1492 | N | LEU | A | 312 | 239.471 | -76.343 | 103.445 | 1.00 | 56.37 | A | N |
| ATOM | 1493 | CA | LEU | A | 312 | 238.117 | -76.031 | 103.815 | 1.00 | 45.08 | A | C |
| ATOM | 1494 | CB | LEU | A | 312 | 237.135 | -76.975 | 103.126 | 1.00 | 46.93 | A | C |
| ATOM | 1495 | CG | LEU | A | 312 | 236.719 | -76.481 | 101.746 | 1.00 | 45.65 | A | C |
| ATOM | 1496 | CD1 | LEU | A | 312 | 236.262 | -77.698 | 100.966 | 1.00 | 57.08 | A | C |
| ATOM | 1497 | CD2 | LEU | A | 312 | 235.607 | -75.431 | 101.878 | 1.00 | 42.14 | A | C |
| ATOM | 1498 | C | LEU | A | 312 | 238.066 | -76.204 | 105.309 | 1.00 | 42.72 | A | C |
| ATOM | 1499 | O | LEU | A | 312 | 237.357 | -75.451 | 105.986 | 1.00 | 41.50 | A | O |
| ATOM | 1500 | N | TRP | A | 313 | 238.778 | -77.211 | 105.814 | 1.00 | 35.13 | A | N |
| ATOM | 1501 | CA | TRP | A | 313 | 238.818 | -77.454 | 107.257 | 1.00 | 42.05 | A | C |
| ATOM | 1502 | CB | TRP | A | 313 | 239.630 | -78.718 | 107.532 | 1.00 | 37.59 | A | C |
| ATOM | 1503 | CG | TRP | A | 313 | 239.903 | -78.960 | 108.973 | 1.00 | 37.21 | A | C |
| ATOM | 1504 | CD2 | TRP | A | 313 | 239.169 | -79.815 | 109.859 | 1.00 | 38.09 | A | C |
| ATOM | 1505 | CE2 | TRP | A | 313 | 239.786 | -79.742 | 111.133 | 1.00 | 40.55 | A | C |
| ATOM | 1506 | CE3 | TRP | A | 313 | 238.050 | -80.627 | 109.706 | 1.00 | 42.38 | A | C |
| ATOM | 1507 | CD1 | TRP | A | 313 | 240.895 | -78.418 | 109.716 | 1.00 | 40.67 | A | C |
| ATOM | 1508 | NE1 | TRP | A | 313 | 240.843 | -78.885 | 111.022 | 1.00 | 36.83 | A | N |
| ATOM | 1509 | CZ2 | TRP | A | 313 | 239.325 | -80.470 | 112.237 | 1.00 | 41.12 | A | C |
| ATOM | 1510 | CZ3 | TRP | A | 313 | 237.591 | -81.353 | 110.817 | 1.00 | 40.98 | A | C |
| ATOM | 1511 | CH2 | TRP | A | 313 | 238.220 | -81.265 | 112.052 | 1.00 | 42.79 | A | C |
| ATOM | 1512 | C | TRP | A | 313 | 239.448 | -76.259 | 108.009 | 1.00 | 45.03 | A | C |
| ATOM | 1513 | O | TRP | A | 313 | 238.971 | -75.813 | 109.044 | 1.00 | 49.94 | A | O |
| ATOM | 1514 | N | SER | A | 314 | 240.543 | -75.748 | 107.477 | 1.00 | 46.02 | A | N |
| ATOM | 1515 | CA | SER | A | 314 | 241.220 | -74.624 | 108.087 | 1.00 | 41.93 | A | C |
| ATOM | 1516 | CB | SER | A | 314 | 242.523 | -74.354 | 107.341 | 1.00 | 44.32 | A | C |
| ATOM | 1517 | OG | SER | A | 314 | 243.333 | -75.505 | 107.387 | 1.00 | 38.93 | A | O |
| ATOM | 1518 | C | SER | A | 314 | 240.338 | -73.392 | 108.062 | 1.00 | 39.99 | A | C |
| ATOM | 1519 | O | SER | A | 314 | 240.328 | -72.596 | 109.011 | 1.00 | 45.37 | A | O |
| ATOM | 1520 | N | LEU | A | 315 | 239.616 | -73.226 | 106.965 | 1.00 | 35.87 | A | N |
| ATOM | 1521 | CA | LEU | A | 315 | 238.704 | -72.091 | 106.805 | 1.00 | 35.10 | A | C |
| ATOM | 1522 | CB | LEU | A | 315 | 238.115 | -72.091 | 105.390 | 1.00 | 34.40 | A | C |
| ATOM | 1523 | CG | LEU | A | 315 | 237.307 | -70.872 | 104.991 | 1.00 | 41.64 | A | C |
| ATOM | 1524 | CD1 | LEU | A | 315 | 238.136 | -69.564 | 105.204 | 1.00 | 42.79 | A | C |
| ATOM | 1525 | CD2 | LEU | A | 315 | 236.927 | -71.022 | 103.523 | 1.00 | 40.03 | A | C |
| ATOM | 1526 | C | LEU | A | 315 | 237.569 | -72.154 | 107.851 | 1.00 | 38.86 | A | C |
| ATOM | 1527 | O | LEU | A | 315 | 236.854 | -71.200 | 108.035 | 1.00 | 42.90 | A | O |
| ATOM | 1528 | N | GLY | A | 316 | 237.421 | -73.301 | 108.515 | 1.00 | 40.90 | A | N |
| ATOM | 1529 | CA | GLY | A | 316 | 236.420 | -73.475 | 109.540 | 1.00 | 29.38 | A | C |
| ATOM | 1530 | C | GLY | A | 316 | 237.051 | -73.072 | 110.863 | 1.00 | 33.31 | A | C |
| ATOM | 1531 | O | GLY | A | 316 | 236.444 | -72.317 | 111.644 | 1.00 | 44.99 | A | O |
| ATOM | 1532 | N | VAL | A | 317 | 236.259 | -73.578 | 111.126 | 1.00 | 34.77 | A | N |

| | | | | | | | | | | | | |
|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 1533 | CA | VAL | A | 317 | 238.980 | -73.253 | 112.343 | 1.00 | 38.52 | A | C |
| ATOM | 1534 | CB | VAL | A | 317 | 240.378 | -73.903 | 112.348 | 1.00 | 39.35 | A | C |
| ATOM | 1535 | CG1 | VAL | A | 317 | 241.200 | -73.322 | 113.465 | 1.00 | 39.07 | A | C |
| ATOM | 1536 | CG2 | VAL | A | 317 | 240.268 | -75.403 | 112.500 | 1.00 | 36.59 | A | C |
| ATOM | 1537 | C | VAL | A | 317 | 239.145 | -71.743 | 112.382 | 1.00 | 39.43 | A | C |
| ATOM | 1538 | O | VAL | A | 317 | 238.923 | -71.092 | 113.421 | 1.00 | 39.97 | A | O |
| ATOM | 1539 | N | LEU | A | 318 | 239.517 | -71.195 | 111.226 | 1.00 | 35.94 | A | N |
| ATOM | 1540 | CA | LEU | A | 318 | 239.728 | -69.769 | 111.107 | 1.00 | 35.49 | A | C |
| ATOM | 1541 | CB | LEU | A | 318 | 240.217 | -69.443 | 109.701 | 1.00 | 34.72 | A | C |
| ATOM | 1542 | CG | LEU | A | 318 | 241.505 | -68.678 | 109.594 | 1.00 | 35.85 | A | C |
| ATOM | 1543 | CD1 | LEU | A | 318 | 242.492 | -69.129 | 110.631 | 1.00 | 35.87 | A | C |
| ATOM | 1544 | CD2 | LEU | A | 318 | 242.040 | -68.906 | 108.254 | 1.00 | 39.24 | A | C |
| ATOM | 1545 | C | LEU | A | 318 | 238.440 | -68.952 | 111.425 | 1.00 | 41.79 | A | C |
| ATOM | 1546 | O | LEU | A | 318 | 238.499 | -67.943 | 112.191 | 1.00 | 36.26 | A | O |
| ATOM | 1547 | N | CYS | A | 319 | 237.301 | -69.398 | 110.858 | 1.00 | 35.62 | A | N |
| ATOM | 1548 | CA | CYS | A | 319 | 236.053 | -68.700 | 111.024 | 1.00 | 40.61 | A | C |
| ATOM | 1549 | CB | CYS | A | 319 | 235.013 | -69.338 | 110.158 | 1.00 | 35.35 | A | C |
| ATOM | 1550 | SG | CYS | A | 319 | 233.324 | -68.489 | 110.215 | 1.00 | 25.40 | A | S |
| ATOM | 1551 | C | CYS | A | 319 | 235.640 | -68.734 | 112.482 | 1.00 | 35.51 | A | C |
| ATOM | 1552 | O | CYS | A | 319 | 235.027 | -67.810 | 112.980 | 1.00 | 40.27 | A | O |
| ATOM | 1553 | N | TYR | A | 320 | 236.009 | -69.795 | 113.182 | 1.00 | 38.46 | A | N |
| ATOM | 1554 | CA | TYR | A | 320 | 235.683 | -69.942 | 114.604 | 1.00 | 39.25 | A | C |
| ATOM | 1555 | CB | TYR | A | 320 | 235.867 | -71.406 | 115.016 | 1.00 | 37.24 | A | C |
| ATOM | 1556 | CG | TYR | A | 320 | 235.634 | -71.683 | 116.479 | 1.00 | 38.04 | A | C |
| ATOM | 1557 | CD1 | TYR | A | 320 | 236.573 | -71.333 | 117.438 | 1.00 | 34.91 | A | C |
| ATOM | 1558 | CE1 | TYR | A | 320 | 236.380 | -71.640 | 118.800 | 1.00 | 31.79 | A | C |
| ATOM | 1559 | CD2 | TYR | A | 320 | 234.484 | -72.331 | 116.892 | 1.00 | 39.29 | A | C |
| ATOM | 1560 | CE2 | TYR | A | 320 | 234.248 | -72.628 | 118.233 | 1.00 | 35.49 | A | C |
| ATOM | 1561 | CZ | TYR | A | 320 | 235.191 | -72.289 | 119.198 | 1.00 | 41.97 | A | C |
| ATOM | 1562 | OH | TYR | A | 320 | 234.905 | -72.575 | 120.532 | 1.00 | 35.00 | A | O |
| ATOM | 1563 | C | TYR | A | 320 | 236.613 | -69.038 | 115.435 | 1.00 | 43.31 | A | C |
| ATOM | 1564 | O | TYR | A | 320 | 236.166 | -68.318 | 116.322 | 1.00 | 51.83 | A | O |
| ATOM | 1565 | N | GLU | A | 321 | 237.910 | -69.073 | 115.144 | 1.00 | 42.04 | A | N |
| ATOM | 1566 | CA | GLU | A | 321 | 238.860 | -68.249 | 115.871 | 1.00 | 43.24 | A | C |
| ATOM | 1567 | CB | GLU | A | 321 | 240.273 | -68.552 | 115.419 | 1.00 | 36.62 | A | C |
| ATOM | 1568 | CG | GLU | A | 321 | 241.311 | -67.733 | 116.144 | 1.00 | 43.20 | A | C |
| ATOM | 1569 | CD | GLU | A | 321 | 242.689 | -68.087 | 115.740 | 1.00 | 47.61 | A | C |
| ATOM | 1570 | OE1 | GLU | A | 321 | 242.845 | -69.101 | 115.003 | 1.00 | 49.19 | A | O |
| ATOM | 1571 | OE2 | GLU | A | 321 | 243.606 | -67.350 | 116.171 | 1.00 | 55.54 | A | O |
| ATOM | 1572 | C | GLU | A | 321 | 238.569 | -66.763 | 115.714 | 1.00 | 42.47 | A | C |
| ATOM | 1573 | O | GLU | A | 321 | 238.794 | -65.970 | 116.656 | 1.00 | 48.77 | A | O |
| ATOM | 1574 | N | PHE | A | 322 | 238.073 | -66.377 | 114.539 | 1.00 | 40.79 | A | N |
| ATOM | 1575 | CA | PHE | A | 322 | 237.728 | -64.970 | 114.299 | 1.00 | 37.96 | A | C |
| ATOM | 1576 | CB | PHE | A | 322 | 237.361 | -64.737 | 112.846 | 1.00 | 37.47 | A | C |
| ATOM | 1577 | CG | PHE | A | 322 | 238.517 | -64.880 | 111.892 | 1.00 | 39.59 | A | C |
| ATOM | 1578 | CD1 | PHE | A | 322 | 239.839 | -64.729 | 112.338 | 1.00 | 34.97 | A | C |
| ATOM | 1579 | CD2 | PHE | A | 322 | 238.279 | -65.133 | 110.515 | 1.00 | 41.97 | A | C |
| ATOM | 1580 | CE1 | PHE | A | 322 | 240.892 | -64.830 | 111.441 | 1.00 | 36.15 | A | C |
| ATOM | 1581 | CE2 | PHE | A | 322 | 239.342 | -65.232 | 109.605 | 1.00 | 35.10 | A | C |
| ATOM | 1582 | CZ | PHE | A | 322 | 240.649 | -65.081 | 110.070 | 1.00 | 38.47 | A | C |
| ATOM | 1583 | C | PHE | A | 322 | 236.569 | -64.466 | 115.166 | 1.00 | 40.06 | A | C |
| ATOM | 1584 | O | PHE | A | 322 | 236.542 | -63.305 | 115.532 | 1.00 | 37.07 | A | O |
| ATOM | 1585 | N | LEU | A | 323 | 235.636 | -65.356 | 115.499 | 1.00 | 34.80 | A | N |
| ATOM | 1586 | CA | LEU | A | 323 | 234.484 | -65.021 | 116.291 | 1.00 | 30.32 | A | C |
| ATOM | 1587 | CB | LEU | A | 323 | 233.317 | -65.873 | 115.774 | 1.00 | 28.53 | A | C |
| ATOM | 1588 | CG | LEU | A | 323 | 232.935 | -65.689 | 114.325 | 1.00 | 29.77 | A | C |
| ATOM | 1589 | CD1 | LEU | A | 323 | 231.967 | -66.804 | 113.984 | 1.00 | 24.59 | A | C |
| ATOM | 1590 | CD2 | LEU | A | 323 | 232.306 | -64.288 | 114.046 | 1.00 | 30.36 | A | C |
| ATOM | 1591 | C | LEU | A | 323 | 234.661 | -65.226 | 117.824 | 1.00 | 40.81 | A | C |
| ATOM | 1592 | O | LEU | A | 323 | 234.058 | -64.495 | 118.618 | 1.00 | 36.74 | A | O |
| ATOM | 1593 | N | VAL | A | 324 | 235.435 | -66.247 | 118.216 | 1.00 | 38.37 | A | N |
| ATOM | 1594 | CA | VAL | A | 324 | 235.629 | -66.590 | 119.612 | 1.00 | 35.74 | A | C |
| ATOM | 1595 | CB | VAL | A | 324 | 235.648 | -68.102 | 119.816 | 1.00 | 37.17 | A | C |
| ATOM | 1596 | CG1 | VAL | A | 324 | 235.879 | -68.419 | 121.294 | 1.00 | 34.96 | A | C |
| ATOM | 1597 | CG2 | VAL | A | 324 | 234.352 | -68.697 | 119.303 | 1.00 | 26.08 | A | C |
| ATOM | 1598 | C | VAL | A | 324 | 236.903 | -66.012 | 120.154 | 1.00 | 35.95 | A | C |
| ATOM | 1599 | O | VAL | A | 324 | 236.947 | -65.631 | 121.301 | 1.00 | 44.11 | A | O |
| ATOM | 1600 | N | GLY | A | 325 | 237.936 | -65.929 | 119.330 | 1.00 | 41.01 | A | N |
| ATOM | 1601 | CA | GLY | A | 325 | 239.198 | -65.355 | 119.782 | 1.00 | 39.51 | A | C |
| ATOM | 1602 | C | GLY | A | 325 | 240.283 | -66.402 | 119.960 | 1.00 | 44.55 | A | C |

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|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 1603 | O | GLY | A | 325 | 241.414 | -66.092 | 120.321 | 1.00 | 38.22 | A | O |
| ATOM | 1604 | N | LYS | A | 326 | 239.929 | -67.663 | 119.722 | 1.00 | 45.05 | A | N |
| ATOM | 1605 | CA | LYS | A | 326 | 240.881 | -68.764 | 119.861 | 1.00 | 45.42 | A | C |
| ATOM | 1606 | CB | LYS | A | 326 | 240.994 | -69.180 | 121.325 | 1.00 | 52.62 | A | C |
| ATOM | 1607 | CG | LYS | A | 326 | 239.699 | -69.600 | 121.927 | 1.00 | 55.78 | A | C |
| ATOM | 1608 | CD | LYS | A | 326 | 239.856 | -69.912 | 123.415 | 1.00 | 60.70 | A | C |
| ATOM | 1609 | CE | LYS | A | 326 | 238.486 | -70.233 | 124.058 | 1.00 | 66.17 | A | C |
| ATOM | 1610 | NZ | LYS | A | 326 | 238.569 | -70.651 | 125.479 | 1.00 | 62.77 | A | N |
| ATOM | 1611 | C | LYS | A | 326 | 240.419 | -69.937 | 119.005 | 1.00 | 46.11 | A | C |
| ATOM | 1612 | O | LYS | A | 326 | 239.259 | -70.074 | 118.767 | 1.00 | 39.63 | A | O |
| ATOM | 1613 | N | PRO | A | 327 | 241.336 | -70.820 | 118.568 | 1.00 | 53.36 | A | N |
| ATOM | 1614 | CD | PRO | A | 327 | 242.773 | -70.850 | 118.901 | 1.00 | 43.78 | A | C |
| ATOM | 1615 | CA | PRO | A | 327 | 240.980 | -71.968 | 117.726 | 1.00 | 41.74 | A | C |
| ATOM | 1616 | CB | PRO | A | 327 | 242.331 | -72.631 | 117.446 | 1.00 | 38.86 | A | C |
| ATOM | 1617 | CG | PRO | A | 327 | 243.349 | -71.561 | 117.738 | 1.00 | 42.00 | A | C |
| ATOM | 1618 | C | PRO | A | 327 | 240.064 | -72.895 | 118.474 | 1.00 | 40.42 | A | C |
| ATOM | 1619 | O | PRO | A | 327 | 240.166 | -73.021 | 119.700 | 1.00 | 46.66 | A | O |
| ATOM | 1620 | N | PRO | A | 328 | 239.209 | -73.624 | 117.743 | 1.00 | 40.91 | A | N |
| ATOM | 1621 | CD | PRO | A | 328 | 239.083 | -73.540 | 116.278 | 1.00 | 35.93 | A | C |
| ATOM | 1622 | CA | PRO | A | 328 | 238.232 | -74.572 | 118.297 | 1.00 | 43.34 | A | C |
| ATOM | 1623 | CB | PRO | A | 328 | 237.340 | -74.900 | 117.106 | 1.00 | 40.94 | A | C |
| ATOM | 1624 | CG | PRO | A | 328 | 238.298 | -74.799 | 115.948 | 1.00 | 38.83 | A | C |
| ATOM | 1625 | C | PRO | A | 328 | 238.785 | -75.820 | 118.933 | 1.00 | 44.48 | A | C |
| ATOM | 1626 | O | PRO | A | 328 | 238.075 | -76.507 | 119.657 | 1.00 | 56.46 | A | O |
| ATOM | 1627 | N | PHE | A | 329 | 240.053 | -76.118 | 118.674 | 1.00 | 50.25 | A | N |
| ATOM | 1628 | CA | PHE | A | 329 | 240.691 | -77.334 | 119.223 | 1.00 | 45.46 | A | C |
| ATOM | 1629 | CB | PHE | A | 329 | 241.119 | -78.268 | 118.089 | 1.00 | 42.34 | A | C |
| ATOM | 1630 | CG | PHE | A | 329 | 240.026 | -78.559 | 117.139 | 1.00 | 42.28 | A | C |
| ATOM | 1631 | CD1 | PHE | A | 329 | 238.895 | -79.252 | 117.575 | 1.00 | 39.79 | A | C |
| ATOM | 1632 | CD2 | PHE | A | 329 | 240.097 | -78.138 | 115.808 | 1.00 | 39.80 | A | C |
| ATOM | 1633 | CE1 | PHE | A | 329 | 237.824 | -79.529 | 116.665 | 1.00 | 42.28 | A | C |
| ATOM | 1634 | CE2 | PHE | A | 329 | 239.034 | -78.408 | 114.902 | 1.00 | 45.87 | A | C |
| ATOM | 1635 | CZ | PHE | A | 329 | 237.903 | -79.106 | 115.332 | 1.00 | 40.12 | A | C |
| ATOM | 1636 | C | PHE | A | 329 | 241.904 | -76.978 | 120.064 | 1.00 | 45.73 | A | C |
| ATOM | 1637 | O | PHE | A | 329 | 242.769 | -77.808 | 120.277 | 1.00 | 40.30 | A | O |
| ATOM | 1638 | N | GLU | A | 330 | 241.958 | -75.741 | 120.543 | 1.00 | 44.00 | A | N |
| ATOM | 1639 | CA | GLU | A | 330 | 243.070 | -75.285 | 121.345 | 1.00 | 50.19 | A | C |
| ATOM | 1640 | CB | GLU | A | 330 | 242.855 | -73.844 | 121.787 | 1.00 | 54.34 | A | C |
| ATOM | 1641 | CG | GLU | A | 330 | 244.140 | -73.087 | 122.035 | 1.00 | 65.74 | A | C |
| ATOM | 1642 | CD | GLU | A | 330 | 243.932 | -71.802 | 122.845 | 1.00 | 74.00 | A | C |
| ATOM | 1643 | OE1 | GLU | A | 330 | 244.822 | -70.906 | 122.794 | 1.00 | 80.13 | A | O |
| ATOM | 1644 | OE2 | GLU | A | 330 | 242.884 | -71.701 | 123.543 | 1.00 | 77.27 | A | O |
| ATOM | 1645 | C | GLU | A | 330 | 243.172 | -76.161 | 122.550 | 1.00 | 51.87 | A | C |
| ATOM | 1646 | O | GLU | A | 330 | 242.158 | -76.668 | 123.029 | 1.00 | 54.61 | A | O |
| ATOM | 1647 | N | ALA | A | 331 | 244.404 | -76.359 | 123.020 | 1.00 | 56.85 | A | N |
| ATOM | 1648 | CA | ALA | A | 331 | 244.680 | -77.163 | 124.217 | 1.00 | 60.04 | A | C |
| ATOM | 1649 | CB | ALA | A | 331 | 244.791 | -78.618 | 123.872 | 1.00 | 51.13 | A | C |
| ATOM | 1650 | C | ALA | A | 331 | 245.992 | -76.676 | 124.795 | 1.00 | 60.84 | A | C |
| ATOM | 1651 | O | ALA | A | 331 | 246.630 | -75.805 | 124.208 | 1.00 | 69.22 | A | O |
| ATOM | 1652 | N | ASN | A | 332 | 246.378 | -77.197 | 125.962 | 1.00 | 64.86 | A | N |
| ATOM | 1653 | CA | ASN | A | 332 | 247.637 | -76.790 | 126.560 | 1.00 | 61.08 | A | C |
| ATOM | 1654 | CB | ASN | A | 332 | 247.514 | -76.742 | 128.100 | 1.00 | 60.00 | A | C |
| ATOM | 1655 | CG | ASN | A | 332 | 246.822 | -75.435 | 128.611 | 1.00 | 67.42 | A | C |
| ATOM | 1656 | OD1 | ASN | A | 332 | 247.429 | -74.359 | 128.654 | 1.00 | 68.56 | A | O |
| ATOM | 1657 | ND2 | ASN | A | 332 | 245.547 | -75.544 | 129.000 | 1.00 | 72.60 | A | N |
| ATOM | 1658 | C | ASN | A | 332 | 248.807 | -77.666 | 126.080 | 1.00 | 60.05 | A | C |
| ATOM | 1659 | O | ASN | A | 332 | 249.966 | -77.257 | 126.234 | 1.00 | 65.40 | A | O |
| ATOM | 1660 | N | THR | A | 333 | 248.512 | -78.823 | 125.460 | 1.00 | 53.02 | A | N |
| ATOM | 1661 | CA | THR | A | 333 | 249.562 | -79.745 | 124.976 | 1.00 | 54.16 | A | C |
| ATOM | 1662 | CB | THR | A | 333 | 249.652 | -81.103 | 125.782 | 1.00 | 55.23 | A | C |
| ATOM | 1663 | OG1 | THR | A | 333 | 248.822 | -82.111 | 125.160 | 1.00 | 53.00 | A | O |
| ATOM | 1664 | CG2 | THR | A | 333 | 249.296 | -80.907 | 127.225 | 1.00 | 55.86 | A | C |
| ATOM | 1665 | C | THR | A | 333 | 249.400 | -80.153 | 123.497 | 1.00 | 59.22 | A | C |
| ATOM | 1666 | O | THR | A | 333 | 248.379 | -79.845 | 122.897 | 1.00 | 59.44 | A | O |
| ATOM | 1667 | N | TYR | A | 334 | 250.358 | -80.901 | 122.930 | 1.00 | 66.35 | A | N |
| ATOM | 1668 | CA | TYR | A | 334 | 250.331 | -81.305 | 121.506 | 1.00 | 67.76 | A | C |
| ATOM | 1669 | CB | TYR | A | 334 | 251.770 | -81.458 | 120.999 | 1.00 | 65.59 | A | C |
| ATOM | 1670 | CG | TYR | A | 334 | 251.922 | -82.193 | 119.636 | 1.00 | 60.98 | A | C |
| ATOM | 1671 | CD1 | TYR | A | 334 | 252.369 | -81.519 | 118.539 | 1.00 | 58.37 | A | C |
| ATOM | 1672 | CE1 | TYR | A | 334 | 252.454 | -82.152 | 117.323 | 1.00 | 57.12 | A | C |

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|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 1673 | CD2 | TYR | A | 334 | 251.556 | -83.561 | 119.454 | 1.00 | 60.46 | A | C |
| ATOM | 1674 | CE2 | TYR | A | 334 | 251.612 | -84.203 | 118.235 | 1.00 | 54.51 | A | C |
| ATOM | 1675 | CZ | TYR | A | 334 | 252.081 | -83.483 | 117.170 | 1.00 | 61.53 | A | C |
| ATOM | 1676 | OH | TYR | A | 334 | 252.259 | -84.054 | 115.932 | 1.00 | 64.63 | A | O |
| ATOM | 1677 | C | TYR | A | 334 | 249.706 | -82.673 | 121.408 | 1.00 | 72.76 | A | C |
| ATOM | 1678 | O | TYR | A | 334 | 249.561 | -83.257 | 120.347 | 1.00 | 80.80 | A | O |
| ATOM | 1679 | N | GLN | A | 335 | 249.281 | -83.198 | 122.511 | 1.00 | 75.82 | A | N |
| ATOM | 1680 | CA | GLN | A | 335 | 248.849 | -84.550 | 122.438 | 1.00 | 75.10 | A | C |
| ATOM | 1681 | CB | GLN | A | 335 | 249.822 | -85.260 | 123.381 | 1.00 | 74.39 | A | C |
| ATOM | 1682 | CG | GLN | A | 335 | 251.326 | -84.889 | 123.021 | 1.00 | 71.11 | A | C |
| ATOM | 1683 | CD | GLN | A | 335 | 252.200 | -84.301 | 124.134 | 1.00 | 70.17 | A | C |
| ATOM | 1684 | OE1 | GLN | A | 335 | 253.434 | -84.204 | 123.959 | 1.00 | 71.56 | A | O |
| ATOM | 1685 | NE2 | GLN | A | 335 | 251.605 | -83.897 | 125.269 | 1.00 | 67.14 | A | N |
| ATOM | 1686 | C | GLN | A | 335 | 247.415 | -84.426 | 122.926 | 1.00 | 72.12 | A | C |
| ATOM | 1687 | O | GLN | A | 335 | 246.584 | -85.314 | 122.698 | 1.00 | 70.11 | A | O |
| ATOM | 1688 | N | GLU | A | 336 | 247.129 | -83.272 | 123.527 | 1.00 | 67.17 | A | N |
| ATOM | 1689 | CA | GLU | A | 336 | 245.815 | -82.981 | 124.050 | 1.00 | 66.23 | A | C |
| ATOM | 1690 | CB | GLU | A | 336 | 245.911 | -81.929 | 125.131 | 1.00 | 54.23 | A | C |
| ATOM | 1691 | C | GLU | A | 336 | 245.132 | -82.389 | 122.779 | 1.00 | 63.60 | A | C |
| ATOM | 1692 | O | GLU | A | 336 | 243.998 | -82.726 | 122.478 | 1.00 | 68.92 | A | O |
| ATOM | 1693 | N | THR | A | 337 | 245.807 | -81.474 | 122.060 | 1.00 | 63.51 | A | N |
| ATOM | 1694 | CA | THR | A | 337 | 245.246 | -80.840 | 120.863 | 1.00 | 45.32 | A | C |
| ATOM | 1695 | CB | THR | A | 337 | 246.221 | -79.805 | 120.292 | 1.00 | 48.60 | A | C |
| ATOM | 1696 | OG1 | THR | A | 337 | 246.433 | -78.730 | 121.227 | 1.00 | 44.49 | A | O |
| ATOM | 1697 | CG2 | THR | A | 337 | 245.691 | -79.262 | 118.948 | 1.00 | 33.80 | A | C |
| ATOM | 1698 | C | THR | A | 337 | 245.031 | -81.916 | 119.825 | 1.00 | 55.74 | A | C |
| ATOM | 1699 | O | THR | A | 337 | 244.036 | -81.911 | 119.094 | 1.00 | 53.43 | A | O |
| ATOM | 1700 | N | TYR | A | 338 | 245.979 | -82.848 | 119.758 | 1.00 | 62.69 | A | N |
| ATOM | 1701 | CA | TYR | A | 338 | 245.902 | -83.948 | 118.795 | 1.00 | 62.09 | A | C |
| ATOM | 1702 | CB | TYR | A | 338 | 247.056 | -84.923 | 119.028 | 1.00 | 70.33 | A | C |
| ATOM | 1703 | CG | TYR | A | 338 | 247.098 | -86.080 | 118.034 | 1.00 | 74.69 | A | C |
| ATOM | 1704 | CD1 | TYR | A | 338 | 248.041 | -86.116 | 117.016 | 1.00 | 72.79 | A | C |
| ATOM | 1705 | CE1 | TYR | A | 338 | 248.050 | -87.154 | 116.101 | 1.00 | 75.92 | A | C |
| ATOM | 1706 | CD2 | TYR | A | 338 | 246.167 | -87.121 | 118.096 | 1.00 | 70.94 | A | C |
| ATOM | 1707 | CE2 | TYR | A | 338 | 246.167 | -88.153 | 117.173 | 1.00 | 73.14 | A | C |
| ATOM | 1708 | CZ | TYR | A | 338 | 247.102 | -88.168 | 116.186 | 1.00 | 73.24 | A | C |
| ATOM | 1709 | OH | TYR | A | 338 | 247.091 | -89.196 | 115.273 | 1.00 | 74.46 | A | O |
| ATOM | 1710 | C | TYR | A | 338 | 244.586 | -84.698 | 118.971 | 1.00 | 62.03 | A | C |
| ATOM | 1711 | O | TYR | A | 338 | 243.884 | -85.017 | 117.982 | 1.00 | 52.46 | A | O |
| ATOM | 1712 | N | LYS | A | 339 | 244.267 | -84.991 | 120.242 | 1.00 | 58.53 | A | N |
| ATOM | 1713 | CA | LYS | A | 339 | 243.048 | -85.733 | 120.587 | 1.00 | 51.87 | A | C |
| ATOM | 1714 | CB | LYS | A | 339 | 243.020 | -86.042 | 122.063 | 1.00 | 52.84 | A | C |
| ATOM | 1715 | C | LYS | A | 339 | 241.791 | -84.990 | 120.165 | 1.00 | 50.97 | A | C |
| ATOM | 1716 | O | LYS | A | 339 | 240.975 | -85.531 | 119.412 | 1.00 | 50.87 | A | O |
| ATOM | 1717 | N | ARG | A | 340 | 241.675 | -83.725 | 120.575 | 1.00 | 44.05 | A | N |
| ATOM | 1718 | CA | ARG | A | 340 | 240.507 | -82.938 | 120.230 | 1.00 | 47.22 | A | C |
| ATOM | 1719 | CB | ARG | A | 340 | 240.532 | -81.574 | 120.904 | 1.00 | 45.76 | A | C |
| ATOM | 1720 | CG | ARG | A | 340 | 240.286 | -81.607 | 122.398 | 1.00 | 52.85 | A | C |
| ATOM | 1721 | CD | ARG | A | 340 | 240.241 | -80.202 | 122.999 | 1.00 | 59.79 | A | C |
| ATOM | 1722 | NE | ARG | A | 340 | 239.045 | -79.491 | 122.535 | 1.00 | 67.64 | A | N |
| ATOM | 1723 | CZ | ARG | A | 340 | 238.843 | -78.186 | 122.672 | 1.00 | 65.86 | A | C |
| ATOM | 1724 | NH1 | ARG | A | 340 | 239.763 | -77.446 | 123.254 | 1.00 | 67.71 | A | N |
| ATOM | 1725 | NH2 | ARG | A | 340 | 237.722 | -77.631 | 122.240 | 1.00 | 68.60 | A | N |
| ATOM | 1726 | C | ARG | A | 340 | 240.299 | -82.765 | 118.738 | 1.00 | 46.20 | A | C |
| ATOM | 1727 | O | ARG | A | 340 | 239.144 | -82.785 | 118.274 | 1.00 | 48.74 | A | O |
| ATOM | 1728 | N | ILE | A | 341 | 241.387 | -82.597 | 117.979 | 1.00 | 47.52 | A | N |
| ATOM | 1729 | CA | ILE | A | 341 | 241.253 | -82.462 | 116.511 | 1.00 | 49.01 | A | C |
| ATOM | 1730 | CB | ILE | A | 341 | 242.586 | -82.067 | 115.787 | 1.00 | 48.35 | A | C |
| ATOM | 1731 | CG2 | ILE | A | 341 | 242.367 | -82.130 | 114.290 | 1.00 | 34.18 | A | C |
| ATOM | 1732 | CG1 | ILE | A | 341 | 243.053 | -80.674 | 116.236 | 1.00 | 44.80 | A | C |
| ATOM | 1733 | CD1 | ILE | A | 341 | 244.317 | -80.259 | 115.592 | 1.00 | 47.34 | A | C |
| ATOM | 1734 | C | ILE | A | 341 | 240.783 | -83.752 | 115.851 | 1.00 | 53.55 | A | C |
| ATOM | 1735 | O | ILE | A | 341 | 239.936 | -83.734 | 114.948 | 1.00 | 44.79 | A | O |
| ATOM | 1736 | N | SER | A | 342 | 241.369 | -84.867 | 116.286 | 1.00 | 59.31 | A | N |
| ATOM | 1737 | CA | SER | A | 342 | 241.014 | -86.175 | 115.743 | 1.00 | 65.95 | A | C |
| ATOM | 1738 | CB | SER | A | 342 | 242.037 | -87.227 | 116.158 | 1.00 | 66.33 | A | C |
| ATOM | 1739 | OG | SER | A | 342 | 241.613 | -88.516 | 115.745 | 1.00 | 63.35 | A | O |
| ATOM | 1740 | C | SER | A | 342 | 239.628 | -86.604 | 116.202 | 1.00 | 65.99 | A | C |
| ATOM | 1741 | O | SER | A | 342 | 238.941 | -87.327 | 115.475 | 1.00 | 61.18 | A | O |
| ATOM | 1742 | N | ARG | A | 343 | 239.232 | -86.162 | 117.400 | 1.00 | 61.34 | A | N |

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|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 1743 | CA | ARG | A | 343 | 237.910 | -86.478 | 117.932 | 1.00 | 59.46 | A | C |
| ATOM | 1744 | CB | ARG | A | 343 | 237.888 | -86.410 | 119.456 | 1.00 | 58.77 | A | C |
| ATOM | 1745 | CG | ARG | A | 343 | 238.466 | -87.604 | 120.201 | 1.00 | 47.50 | A | C |
| ATOM | 1746 | CD | ARG | A | 343 | 238.360 | -87.314 | 121.675 | 1.00 | 60.64 | A | C |
| ATOM | 1747 | NE | ARG | A | 343 | 238.972 | -88.327 | 122.530 | 1.00 | 66.55 | A | N |
| ATOM | 1748 | CZ | ARG | A | 343 | 238.930 | -88.278 | 123.865 | 1.00 | 74.36 | A | C |
| ATOM | 1749 | NH1 | ARG | A | 343 | 238.309 | -87.268 | 124.510 | 1.00 | 73.84 | A | N |
| ATOM | 1750 | NH2 | ARG | A | 343 | 239.502 | -89.248 | 124.573 | 1.00 | 82.35 | A | N |
| ATOM | 1751 | C | ARG | A | 343 | 236.902 | -85.448 | 117.406 | 1.00 | 62.95 | A | C |
| ATOM | 1752 | O | ARG | A | 343 | 235.682 | -85.706 | 117.372 | 1.00 | 61.25 | A | O |
| ATOM | 1753 | N | VAL | A | 344 | 237.421 | -84.275 | 117.011 | 1.00 | 62.37 | A | N |
| ATOM | 1754 | CA | VAL | A | 344 | 236.592 | -83.163 | 116.517 | 1.00 | 52.53 | A | C |
| ATOM | 1755 | CB | VAL | A | 344 | 235.625 | -83.614 | 115.386 | 1.00 | 46.83 | A | C |
| ATOM | 1756 | CG1 | VAL | A | 344 | 235.005 | -82.383 | 114.685 | 1.00 | 30.17 | A | C |
| ATOM | 1757 | CG2 | VAL | A | 344 | 236.378 | -84.445 | 114.375 | 1.00 | 41.05 | A | C |
| ATOM | 1758 | C | VAL | A | 344 | 235.794 | -82.735 | 117.737 | 1.00 | 56.35 | A | C |
| ATOM | 1759 | O | VAL | A | 344 | 234.569 | -82.790 | 117.750 | 1.00 | 58.20 | A | O |
| ATOM | 1760 | N | GLU | A | 345 | 236.521 | -82.345 | 118.775 | 1.00 | 52.70 | A | N |
| ATOM | 1761 | CA | GLU | A | 345 | 235.945 | -81.929 | 120.037 | 1.00 | 55.50 | A | C |
| ATOM | 1762 | CB | GLU | A | 345 | 236.726 | -82.610 | 121.170 | 1.00 | 59.39 | A | C |
| ATOM | 1763 | CG | GLU | A | 345 | 236.049 | -82.656 | 122.512 | 1.00 | 70.94 | A | C |
| ATOM | 1764 | CD | GLU | A | 345 | 236.741 | -83.623 | 123.456 | 1.00 | 80.37 | A | C |
| ATOM | 1765 | OE1 | GLU | A | 345 | 236.904 | -84.815 | 123.076 | 1.00 | 83.68 | A | O |
| ATOM | 1766 | OE2 | GLU | A | 345 | 237.114 | -83.190 | 124.572 | 1.00 | 84.85 | A | O |
| ATOM | 1767 | C | GLU | A | 345 | 235.984 | -80.414 | 120.226 | 1.00 | 55.94 | A | C |
| ATOM | 1768 | O | GLU | A | 345 | 237.012 | -79.866 | 120.647 | 1.00 | 52.34 | A | O |
| ATOM | 1769 | N | PHE | A | 346 | 234.868 | -79.746 | 119.941 | 1.00 | 55.31 | A | N |
| ATOM | 1770 | CA | PHE | A | 346 | 234.777 | -78.298 | 120.123 | 1.00 | 58.97 | A | C |
| ATOM | 1771 | CB | PHE | A | 346 | 235.238 | -77.601 | 118.840 | 1.00 | 55.59 | A | C |
| ATOM | 1772 | CG | PHE | A | 346 | 234.247 | -77.671 | 117.721 | 1.00 | 51.30 | A | C |
| ATOM | 1773 | CD1 | PHE | A | 346 | 233.315 | -76.667 | 117.540 | 1.00 | 47.92 | A | C |
| ATOM | 1774 | CD2 | PHE | A | 346 | 234.261 | -78.734 | 116.842 | 1.00 | 51.74 | A | C |
| ATOM | 1775 | CE1 | PHE | A | 346 | 232.396 | -76.715 | 116.483 | 1.00 | 54.03 | A | C |
| ATOM | 1776 | CE2 | PHE | A | 346 | 233.348 | -78.810 | 115.764 | 1.00 | 54.32 | A | C |
| ATOM | 1777 | CZ | PHE | A | 346 | 232.409 | -77.803 | 115.575 | 1.00 | 51.48 | A | C |
| ATOM | 1778 | C | PHE | A | 346 | 233.356 | -77.832 | 120.501 | 1.00 | 60.04 | A | C |
| ATOM | 1779 | O | PHE | A | 346 | 232.368 | -78.494 | 120.173 | 1.00 | 69.92 | A | O |
| ATOM | 1780 | N | THR | A | 347 | 233.261 | -76.697 | 121.184 | 1.00 | 56.17 | A | N |
| ATOM | 1781 | CA | THR | A | 347 | 231.979 | -76.158 | 121.555 | 1.00 | 54.44 | A | C |
| ATOM | 1782 | CB | THR | A | 347 | 231.732 | -76.329 | 123.013 | 1.00 | 47.09 | A | C |
| ATOM | 1783 | OG1 | THR | A | 347 | 232.718 | -75.600 | 123.725 | 1.00 | 47.43 | A | O |
| ATOM | 1784 | CG2 | THR | A | 347 | 231.799 | -77.783 | 123.402 | 1.00 | 48.24 | A | C |
| ATOM | 1785 | C | THR | A | 347 | 231.885 | -74.683 | 121.223 | 1.00 | 56.33 | A | C |
| ATOM | 1786 | O | THR | A | 347 | 232.902 | -73.985 | 121.113 | 1.00 | 62.80 | A | O |
| ATOM | 1787 | N | PHE | A | 348 | 230.646 | -74.235 | 120.999 | 1.00 | 63.69 | A | N |
| ATOM | 1788 | CA | PHE | A | 348 | 230.389 | -72.815 | 120.723 | 1.00 | 65.89 | A | C |
| ATOM | 1789 | CB | PHE | A | 348 | 229.306 | -72.558 | 119.708 | 1.00 | 57.72 | A | C |
| ATOM | 1790 | CG | PHE | A | 348 | 229.584 | -73.148 | 118.381 | 1.00 | 55.81 | A | C |
| ATOM | 1791 | CD1 | PHE | A | 348 | 229.017 | -74.364 | 118.020 | 1.00 | 51.99 | A | C |
| ATOM | 1792 | CD2 | PHE | A | 348 | 230.337 | -72.462 | 117.450 | 1.00 | 53.67 | A | C |
| ATOM | 1793 | CE1 | PHE | A | 348 | 229.171 | -74.857 | 116.780 | 1.00 | 46.52 | A | C |
| ATOM | 1794 | CE2 | PHE | A | 348 | 230.492 | -72.966 | 116.190 | 1.00 | 50.86 | A | C |
| ATOM | 1795 | CZ | PHE | A | 348 | 229.903 | -74.166 | 115.860 | 1.00 | 51.38 | A | C |
| ATOM | 1796 | C | PHE | A | 348 | 229.966 | -72.048 | 121.961 | 1.00 | 65.81 | A | C |
| ATOM | 1797 | O | PHE | A | 348 | 229.223 | -72.532 | 122.808 | 1.00 | 73.51 | A | O |
| ATOM | 1798 | N | PRO | A | 349 | 230.578 | -70.898 | 122.150 | 1.00 | 59.06 | A | N |
| ATOM | 1799 | CD | PRO | A | 349 | 232.018 | -71.026 | 121.861 | 1.00 | 61.27 | A | C |
| ATOM | 1800 | CA | PRO | A | 349 | 230.381 | -69.933 | 123.199 | 1.00 | 56.66 | A | C |
| ATOM | 1801 | CB | PRO | A | 349 | 231.466 | -68.944 | 122.870 | 1.00 | 58.77 | A | C |
| ATOM | 1802 | CG | PRO | A | 349 | 232.627 | -69.875 | 122.485 | 1.00 | 55.14 | A | C |
| ATOM | 1803 | C | PRO | A | 349 | 228.929 | -69.409 | 122.948 | 1.00 | 57.97 | A | C |
| ATOM | 1804 | O | PRO | A | 349 | 228.312 | -69.642 | 121.916 | 1.00 | 59.47 | A | O |
| ATOM | 1805 | N | ASP | A | 350 | 228.344 | -68.735 | 123.909 | 1.00 | 59.19 | A | N |
| ATOM | 1806 | CA | ASP | A | 350 | 226.961 | -68.282 | 123.714 | 1.00 | 51.98 | A | C |
| ATOM | 1807 | CB | ASP | A | 350 | 226.338 | -67.819 | 125.044 | 1.00 | 65.27 | A | C |
| ATOM | 1808 | CG | ASP | A | 350 | 226.140 | -68.958 | 126.020 | 1.00 | 72.68 | A | C |
| ATOM | 1809 | OD1 | ASP | A | 350 | 225.764 | -68.668 | 127.188 | 1.00 | 77.91 | A | O |
| ATOM | 1810 | OD2 | ASP | A | 350 | 226.359 | -70.131 | 125.607 | 1.00 | 78.14 | A | O |
| ATOM | 1811 | C | ASP | A | 350 | 226.787 | -67.197 | 122.665 | 1.00 | 54.69 | A | C |
| ATOM | 1812 | O | ASP | A | 350 | 225.753 | -67.202 | 121.947 | 1.00 | 40.28 | A | O |

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|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 1813 | N | PHE | A | 351 | 227.786 | -66.308 | 122.539 | 1.00 | 47.45 | A | N |
| ATOM | 1814 | CA | PHE | A | 351 | 227.682 | -65.217 | 121.584 | 1.00 | 51.83 | A | C |
| ATOM | 1815 | CB | PHE | A | 351 | 228.693 | -64.106 | 121.893 | 1.00 | 48.14 | A | C |
| ATOM | 1816 | CG | PHE | A | 351 | 230.108 | -64.580 | 122.004 | 1.00 | 51.21 | A | C |
| ATOM | 1817 | CD1 | PHE | A | 351 | 230.589 | -65.111 | 123.207 | 1.00 | 49.73 | A | C |
| ATOM | 1818 | CD2 | PHE | A | 351 | 230.979 | -64.468 | 120.915 | 1.00 | 46.79 | A | C |
| ATOM | 1819 | CE1 | PHE | A | 351 | 231.906 | -65.506 | 123.312 | 1.00 | 48.51 | A | C |
| ATOM | 1820 | CE2 | PHE | A | 351 | 232.294 | -64.864 | 121.026 | 1.00 | 47.18 | A | C |
| ATOM | 1821 | CZ | PHE | A | 351 | 232.758 | -65.379 | 122.215 | 1.00 | 45.61 | A | C |
| ATOM | 1822 | C | PHE | A | 351 | 227.797 | -65.610 | 120.125 | 1.00 | 52.56 | A | C |
| ATOM | 1823 | O | PHE | A | 351 | 227.604 | -64.771 | 119.250 | 1.00 | 57.29 | A | O |
| ATOM | 1824 | N | VAL | A | 352 | 228.115 | -66.874 | 119.863 | 1.00 | 54.95 | A | N |
| ATOM | 1825 | CA | VAL | A | 352 | 228.263 | -67.341 | 118.495 | 1.00 | 48.00 | A | C |
| ATOM | 1826 | CB | VAL | A | 352 | 229.145 | -68.621 | 118.432 | 1.00 | 43.19 | A | C |
| ATOM | 1827 | CG1 | VAL | A | 352 | 229.300 | -69.094 | 117.035 | 1.00 | 33.61 | A | C |
| ATOM | 1828 | CG2 | VAL | A | 352 | 230.509 | -68.325 | 118.972 | 1.00 | 39.08 | A | C |
| ATOM | 1829 | C | VAL | A | 352 | 226.875 | -67.603 | 117.916 | 1.00 | 48.25 | A | C |
| ATOM | 1830 | O | VAL | A | 352 | 226.211 | -68.567 | 118.255 | 1.00 | 51.46 | A | O |
| ATOM | 1831 | N | THR | A | 353 | 226.446 | -66.748 | 117.004 | 1.00 | 47.51 | A | N |
| ATOM | 1832 | CA | THR | A | 353 | 225.122 | -66.886 | 116.413 | 1.00 | 53.02 | A | C |
| ATOM | 1833 | CB | THR | A | 353 | 224.844 | -65.817 | 115.383 | 1.00 | 47.94 | A | C |
| ATOM | 1834 | OG1 | THR | A | 353 | 225.671 | -66.052 | 114.246 | 1.00 | 54.22 | A | O |
| ATOM | 1835 | CG2 | THR | A | 353 | 225.130 | -64.437 | 115.950 | 1.00 | 47.89 | A | C |
| ATOM | 1836 | C | THR | A | 353 | 224.908 | -68.227 | 115.753 | 1.00 | 52.60 | A | C |
| ATOM | 1837 | O | THR | A | 353 | 225.851 | -68.974 | 115.552 | 1.00 | 52.94 | A | O |
| ATOM | 1838 | N | GLU | A | 354 | 223.654 | -68.513 | 115.404 | 1.00 | 55.25 | A | N |
| ATOM | 1839 | CA | GLU | A | 354 | 223.259 | -69.786 | 114.819 | 1.00 | 56.40 | A | C |
| ATOM | 1840 | CB | GLU | A | 354 | 221.736 | -69.929 | 114.829 | 1.00 | 53.45 | A | C |
| ATOM | 1841 | C | GLU | A | 354 | 223.762 | -69.866 | 113.416 | 1.00 | 56.12 | A | C |
| ATOM | 1842 | O | GLU | A | 354 | 224.078 | -70.954 | 112.927 | 1.00 | 62.85 | A | O |
| ATOM | 1843 | N | GLY | A | 355 | 223.831 | -68.718 | 112.749 | 1.00 | 61.99 | A | N |
| ATOM | 1844 | CA | GLY | A | 355 | 224.317 | -68.699 | 111.373 | 1.00 | 52.27 | A | C |
| ATOM | 1845 | C | GLY | A | 355 | 225.787 | -69.093 | 111.250 | 1.00 | 52.90 | A | C |
| ATOM | 1846 | O | GLY | A | 355 | 226.166 | -69.822 | 110.327 | 1.00 | 47.53 | A | O |
| ATOM | 1847 | N | ALA | A | 356 | 226.611 | -68.602 | 112.182 | 1.00 | 47.86 | A | N |
| ATOM | 1848 | CA | ALA | A | 356 | 228.022 | -68.912 | 112.199 | 1.00 | 45.96 | A | C |
| ATOM | 1849 | CB | ALA | A | 356 | 228.721 | -67.995 | 113.123 | 1.00 | 42.05 | A | C |
| ATOM | 1850 | C | ALA | A | 356 | 228.221 | -70.359 | 112.627 | 1.00 | 47.72 | A | C |
| ATOM | 1851 | O | ALA | A | 356 | 229.011 | -71.078 | 112.025 | 1.00 | 46.93 | A | O |
| ATOM | 1852 | N | ARG | A | 357 | 227.486 | -70.784 | 113.651 | 1.00 | 49.03 | A | N |
| ATOM | 1853 | CA | ARG | A | 357 | 227.558 | -72.153 | 114.146 | 1.00 | 56.76 | A | C |
| ATOM | 1854 | CB | ARG | A | 357 | 226.549 | -72.374 | 115.280 | 1.00 | 55.71 | A | C |
| ATOM | 1855 | CG | ARG | A | 357 | 226.876 | -71.606 | 116.583 | 1.00 | 57.21 | A | C |
| ATOM | 1856 | CD | ARG | A | 357 | 226.018 | -72.108 | 117.752 | 1.00 | 41.40 | A | C |
| ATOM | 1857 | NE | ARG | A | 357 | 226.260 | -71.310 | 118.928 | 1.00 | 43.14 | A | N |
| ATOM | 1858 | CZ | ARG | A | 357 | 225.979 | -71.698 | 120.148 | 1.00 | 39.58 | A | C |
| ATOM | 1859 | NH1 | ARG | A | 357 | 225.456 | -72.893 | 120.340 | 1.00 | 42.66 | A | N |
| ATOM | 1860 | NH2 | ARG | A | 357 | 226.191 | -70.869 | 121.163 | 1.00 | 51.41 | A | N |
| ATOM | 1861 | C | ARG | A | 357 | 227.299 | -73.181 | 113.043 | 1.00 | 58.61 | A | C |
| ATOM | 1862 | O | ARG | A | 357 | 227.922 | -74.260 | 112.996 | 1.00 | 62.70 | A | O |
| ATOM | 1863 | N | ASP | A | 358 | 226.383 | -72.845 | 112.150 | 1.00 | 56.80 | A | N |
| ATOM | 1864 | CA | ASP | A | 358 | 226.053 | -73.738 | 111.055 | 1.00 | 56.49 | A | C |
| ATOM | 1865 | CB | ASP | A | 358 | 224.792 | -73.245 | 110.363 | 1.00 | 59.12 | A | C |
| ATOM | 1866 | CG | ASP | A | 358 | 224.380 | -74.141 | 109.209 | 1.00 | 65.41 | A | C |
| ATOM | 1867 | OD1 | ASP | A | 358 | 224.036 | -75.319 | 109.461 | 1.00 | 60.89 | A | O |
| ATOM | 1868 | OD2 | ASP | A | 358 | 224.403 | -73.669 | 108.049 | 1.00 | 68.71 | A | O |
| ATOM | 1869 | C | ASP | A | 358 | 227.178 | -73.837 | 110.017 | 1.00 | 56.31 | A | C |
| ATOM | 1870 | O | ASP | A | 358 | 227.523 | -74.915 | 109.545 | 1.00 | 56.62 | A | O |
| ATOM | 1871 | N | LEU | A | 359 | 227.735 | -72.694 | 109.640 | 1.00 | 57.58 | A | N |
| ATOM | 1872 | CA | LEU | A | 359 | 228.812 | -72.663 | 108.658 | 1.00 | 55.45 | A | C |
| ATOM | 1873 | CB | LEU | A | 359 | 229.158 | -71.227 | 108.302 | 1.00 | 53.49 | A | C |
| ATOM | 1874 | CG | LEU | A | 359 | 230.326 | -71.029 | 107.344 | 1.00 | 49.10 | A | C |
| ATOM | 1875 | CD1 | LEU | A | 359 | 230.077 | -71.756 | 106.082 | 1.00 | 42.56 | A | C |
| ATOM | 1876 | CD2 | LEU | A | 359 | 230.525 | -69.538 | 107.083 | 1.00 | 51.15 | A | C |
| ATOM | 1877 | C | LEU | A | 359 | 230.048 | -73.366 | 109.200 | 1.00 | 57.66 | A | C |
| ATOM | 1878 | O | LEU | A | 359 | 230.680 | -74.142 | 108.481 | 1.00 | 65.55 | A | O |
| ATOM | 1879 | N | ILE | A | 360 | 230.370 | -73.121 | 110.470 | 1.00 | 49.19 | A | N |
| ATOM | 1880 | CA | ILE | A | 360 | 231.535 | -73.740 | 111.089 | 1.00 | 43.07 | A | C |
| ATOM | 1881 | CB | ILE | A | 360 | 231.819 | -73.111 | 112.485 | 1.00 | 35.85 | A | C |
| ATOM | 1882 | CG2 | ILE | A | 360 | 232.892 | -73.858 | 113.220 | 1.00 | 37.90 | A | C |

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|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 1883 | CG1 | ILE | A | 360 | 232.254 | -71.652 | 112.301 | 1.00 | 32.36 | A | C |
| ATOM | 1884 | CD1 | ILE | A | 360 | 232.250 | -70.839 | 113.653 | 1.00 | 27.28 | A | C |
| ATOM | 1885 | C | ILE | A | 360 | 231.368 | -75.240 | 111.229 | 1.00 | 40.84 | A | C |
| ATOM | 1886 | O | ILE | A | 360 | 232.330 | -75.980 | 111.042 | 1.00 | 44.75 | A | O |
| ATOM | 1887 | N | SER | A | 361 | 230.158 | -75.670 | 111.591 | 1.00 | 46.60 | A | N |
| ATOM | 1888 | CA | SER | A | 361 | 229.855 | -77.089 | 111.780 | 1.00 | 52.65 | A | C |
| ATOM | 1889 | CB | SER | A | 361 | 228.546 | -77.265 | 112.526 | 1.00 | 49.78 | A | C |
| ATOM | 1890 | OG | SER | A | 361 | 228.742 | -77.062 | 113.925 | 1.00 | 60.97 | A | O |
| ATOM | 1891 | C | SER | A | 361 | 229.827 | -77.906 | 110.497 | 1.00 | 53.49 | A | C |
| ATOM | 1892 | O | SER | A | 361 | 229.885 | -79.159 | 110.538 | 1.00 | 53.09 | A | O |
| ATOM | 1893 | N | ARG | A | 362 | 229.799 | -77.198 | 109.368 | 1.00 | 54.39 | A | N |
| ATOM | 1894 | CA | ARG | A | 362 | 229.796 | -77.841 | 108.066 | 1.00 | 52.12 | A | C |
| ATOM | 1895 | CB | ARG | A | 362 | 229.033 | -76.978 | 107.065 | 1.00 | 59.93 | A | C |
| ATOM | 1896 | CG | ARG | A | 362 | 227.535 | -76.862 | 107.327 | 1.00 | 61.75 | A | C |
| ATOM | 1897 | CD | ARG | A | 362 | 226.887 | -75.820 | 106.401 | 1.00 | 69.51 | A | C |
| ATOM | 1898 | NE | ARG | A | 362 | 225.432 | -75.784 | 106.547 | 1.00 | 76.19 | A | N |
| ATOM | 1899 | CZ | ARG | A | 362 | 224.625 | -76.795 | 106.216 | 1.00 | 80.23 | A | C |
| ATOM | 1900 | NH1 | ARG | A | 362 | 225.128 | -77.919 | 105.716 | 1.00 | 81.25 | A | N |
| ATOM | 1901 | NH2 | ARG | A | 362 | 223.313 | -76.697 | 106.397 | 1.00 | 77.76 | A | N |
| ATOM | 1902 | C | ARG | A | 362 | 231.211 | -78.066 | 107.537 | 1.00 | 49.26 | A | C |
| ATOM | 1903 | O | ARG | A | 362 | 231.460 | -79.036 | 106.822 | 1.00 | 49.03 | A | O |
| ATOM | 1904 | N | LEU | A | 363 | 232.120 | -77.162 | 107.891 | 1.00 | 49.05 | A | N |
| ATOM | 1905 | CA | LEU | A | 363 | 233.493 | -77.234 | 107.438 | 1.00 | 46.81 | A | C |
| ATOM | 1906 | CB | LEU | A | 363 | 234.134 | -75.850 | 107.508 | 1.00 | 42.60 | A | C |
| ATOM | 1907 | CG | LEU | A | 363 | 233.457 | -74.729 | 106.714 | 1.00 | 44.53 | A | C |
| ATOM | 1908 | CD1 | LEU | A | 363 | 234.050 | -73.356 | 107.133 | 1.00 | 43.18 | A | C |
| ATOM | 1909 | CD2 | LEU | A | 363 | 233.602 | -74.961 | 105.258 | 1.00 | 42.47 | A | C |
| ATOM | 1910 | C | LEU | A | 363 | 234.270 | -78.228 | 108.280 | 1.00 | 49.03 | A | C |
| ATOM | 1911 | O | LEU | A | 363 | 235.049 | -79.020 | 107.751 | 1.00 | 57.90 | A | O |
| ATOM | 1912 | N | LEU | A | 364 | 234.062 | -78.186 | 109.589 | 1.00 | 47.92 | A | N |
| ATOM | 1913 | CA | LEU | A | 364 | 234.774 | -79.071 | 110.488 | 1.00 | 49.66 | A | C |
| ATOM | 1914 | CB | LEU | A | 364 | 234.792 | -78.462 | 111.909 | 1.00 | 46.24 | A | C |
| ATOM | 1915 | CG | LEU | A | 364 | 235.511 | -77.115 | 112.043 | 1.00 | 47.59 | A | C |
| ATOM | 1916 | CD1 | LEU | A | 364 | 235.230 | -76.547 | 113.413 | 1.00 | 44.59 | A | C |
| ATOM | 1917 | CD2 | LEU | A | 364 | 237.029 | -77.318 | 111.836 | 1.00 | 45.40 | A | C |
| ATOM | 1918 | C | LEU | A | 364 | 234.233 | -80.493 | 110.526 | 1.00 | 50.53 | A | C |
| ATOM | 1919 | O | LEU | A | 364 | 233.804 | -80.963 | 111.575 | 1.00 | 56.94 | A | O |
| ATOM | 1920 | N | LYS | A | 365 | 234.267 | -81.178 | 109.385 | 1.00 | 61.00 | A | N |
| ATOM | 1921 | CA | LYS | A | 365 | 233.796 | -82.564 | 109.263 | 1.00 | 64.52 | A | C |
| ATOM | 1922 | CB | LYS | A | 365 | 233.059 | -82.728 | 107.925 | 1.00 | 60.48 | A | C |
| ATOM | 1923 | CG | LYS | A | 365 | 231.753 | -81.921 | 107.829 | 1.00 | 53.27 | A | C |
| ATOM | 1924 | CD | LYS | A | 365 | 230.702 | -82.412 | 108.828 | 1.00 | 61.58 | A | C |
| ATOM | 1925 | CE | LYS | A | 365 | 229.295 | -81.895 | 108.447 | 1.00 | 59.92 | A | C |
| ATOM | 1926 | NZ | LYS | A | 365 | 228.297 | -82.223 | 109.508 | 1.00 | 75.42 | A | N |
| ATOM | 1927 | C | LYS | A | 365 | 235.026 | -83.500 | 109.392 | 1.00 | 66.56 | A | C |
| ATOM | 1928 | O | LYS | A | 365 | 236.146 | -83.084 | 109.123 | 1.00 | 71.71 | A | O |
| ATOM | 1929 | N | HIS | A | 366 | 234.844 | -84.748 | 109.813 | 1.00 | 68.20 | A | N |
| ATOM | 1930 | CA | HIS | A | 366 | 236.011 | -85.628 | 110.015 | 1.00 | 67.59 | A | C |
| ATOM | 1931 | CB | HIS | A | 366 | 235.781 | -86.664 | 111.109 | 1.00 | 66.12 | A | C |
| ATOM | 1932 | CG | HIS | A | 366 | 236.913 | -87.628 | 111.242 | 1.00 | 68.47 | A | C |
| ATOM | 1933 | CD2 | HIS | A | 366 | 237.810 | -87.749 | 112.245 | 1.00 | 66.88 | A | C |
| ATOM | 1934 | ND1 | HIS | A | 366 | 237.332 | -88.487 | 110.238 | 1.00 | 66.01 | A | N |
| ATOM | 1935 | CE1 | HIS | A | 366 | 238.454 | -89.075 | 110.623 | 1.00 | 70.20 | A | C |
| ATOM | 1936 | NE2 | HIS | A | 366 | 238.761 | -88.643 | 111.832 | 1.00 | 64.97 | A | N |
| ATOM | 1937 | C | HIS | A | 366 | 236.184 | -86.385 | 108.739 | 1.00 | 68.25 | A | C |
| ATOM | 1938 | O | HIS | A | 366 | 237.098 | -87.249 | 108.572 | 1.00 | 74.87 | A | O |
| ATOM | 1939 | N | ASN | A | 367 | 235.262 | -86.111 | 107.848 | 1.00 | 65.45 | A | N |
| ATOM | 1940 | CA | ASN | A | 367 | 235.379 | -86.795 | 106.656 | 1.00 | 62.81 | A | C |
| ATOM | 1941 | CB | ASN | A | 367 | 234.189 | -87.664 | 106.498 | 1.00 | 64.61 | A | C |
| ATOM | 1942 | CG | ASN | A | 367 | 234.335 | -88.548 | 105.333 | 1.00 | 69.77 | A | C |
| ATOM | 1943 | OD1 | ASN | A | 367 | 234.339 | -88.071 | 104.175 | 1.00 | 65.35 | A | O |
| ATOM | 1944 | ND2 | ASN | A | 367 | 234.518 | -89.855 | 105.596 | 1.00 | 69.27 | A | N |
| ATOM | 1945 | C | ASN | A | 367 | 235.504 | -85.791 | 105.596 | 1.00 | 60.17 | A | C |
| ATOM | 1946 | O | ASN | A | 367 | 234.685 | -84.923 | 105.475 | 1.00 | 67.65 | A | O |
| ATOM | 1947 | N | PRO | A | 368 | 236.650 | -85.797 | 104.923 | 1.00 | 60.54 | A | N |
| ATOM | 1948 | CD | PRO | A | 368 | 237.882 | -86.364 | 105.504 | 1.00 | 55.35 | A | C |
| ATOM | 1949 | CA | PRO | A | 368 | 236.981 | -84.895 | 103.820 | 1.00 | 55.82 | A | C |
| ATOM | 1950 | CB | PRO | A | 368 | 238.199 | -85.537 | 103.245 | 1.00 | 50.93 | A | C |
| ATOM | 1951 | CG | PRO | A | 368 | 238.938 | -85.936 | 104.468 | 1.00 | 54.85 | A | C |
| ATOM | 1952 | C | PRO | A | 368 | 235.870 | -84.741 | 102.783 | 1.00 | 59.90 | A | C |

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|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 1953 | O | PRO | A | 368 | 235.706 | -83.658 | 102.240 | 1.00 | 61.00 | A | O |
| ATOM | 1954 | N | SER | A | 369 | 235.093 | -85.805 | 102.557 | 1.00 | 69.67 | A | N |
| ATOM | 1955 | CA | SER | A | 369 | 234.000 | -85.800 | 101.588 | 1.00 | 72.88 | A | C |
| ATOM | 1956 | CB | SER | A | 369 | 233.537 | -87.237 | 101.347 | 1.00 | 75.22 | A | C |
| ATOM | 1957 | OG | SER | A | 369 | 234.654 | -88.115 | 101.256 | 1.00 | 85.92 | A | O |
| ATOM | 1958 | C | SER | A | 369 | 232.810 | -84.951 | 102.046 | 1.00 | 71.84 | A | C |
| ATOM | 1959 | O | SER | A | 369 | 232.217 | -84.231 | 101.229 | 1.00 | 75.53 | A | O |
| ATOM | 1960 | N | GLN | A | 370 | 232.465 | -85.039 | 103.333 | 1.00 | 67.85 | A | N |
| ATOM | 1961 | CA | GLN | A | 370 | 231.339 | -84.296 | 103.865 | 1.00 | 62.69 | A | C |
| ATOM | 1962 | CB | GLN | A | 370 | 231.067 | -84.743 | 105.296 | 1.00 | 64.15 | A | C |
| ATOM | 1963 | CG | GLN | A | 370 | 230.629 | -86.190 | 105.390 | 1.00 | 65.40 | A | C |
| ATOM | 1964 | CD | GLN | A | 370 | 230.923 | -86.768 | 106.745 | 1.00 | 69.41 | A | C |
| ATOM | 1965 | OE1 | GLN | A | 370 | 230.904 | -86.051 | 107.752 | 1.00 | 75.34 | A | O |
| ATOM | 1966 | NE2 | GLN | A | 370 | 231.189 | -88.073 | 106.792 | 1.00 | 63.71 | A | N |
| ATOM | 1967 | C | GLN | A | 370 | 231.551 | -82.778 | 103.799 | 1.00 | 63.34 | A | C |
| ATOM | 1968 | O | GLN | A | 370 | 230.582 | -82.028 | 103.608 | 1.00 | 65.90 | A | O |
| ATOM | 1969 | N | ARG | A | 371 | 232.802 | -82.324 | 103.934 | 1.00 | 56.18 | A | N |
| ATOM | 1970 | CA | ARG | A | 371 | 233.085 | -80.905 | 103.889 | 1.00 | 54.33 | A | C |
| ATOM | 1971 | CB | ARG | A | 371 | 234.581 | -80.691 | 103.961 | 1.00 | 48.64 | A | C |
| ATOM | 1972 | CG | ARG | A | 371 | 235.109 | -80.785 | 105.354 | 1.00 | 46.61 | A | C |
| ATOM | 1973 | CD | ARG | A | 371 | 236.618 | -80.922 | 105.403 | 1.00 | 43.30 | A | C |
| ATOM | 1974 | NE | ARG | A | 371 | 236.988 | -81.971 | 106.350 | 1.00 | 42.51 | A | N |
| ATOM | 1975 | CZ | ARG | A | 371 | 238.208 | -82.476 | 106.436 | 1.00 | 42.45 | A | C |
| ATOM | 1976 | NH1 | ARG | A | 371 | 239.165 | -81.997 | 105.635 | 1.00 | 36.24 | A | N |
| ATOM | 1977 | NH2 | ARG | A | 371 | 238.449 | -83.494 | 107.266 | 1.00 | 33.74 | A | N |
| ATOM | 1978 | C | ARG | A | 371 | 232.496 | -80.275 | 102.651 | 1.00 | 56.25 | A | C |
| ATOM | 1979 | O | ARG | A | 371 | 232.578 | -80.836 | 101.587 | 1.00 | 64.77 | A | O |
| ATOM | 1980 | N | PRO | A | 372 | 231.885 | -79.089 | 102.783 | 1.00 | 60.04 | A | N |
| ATOM | 1981 | CD | PRO | A | 372 | 231.813 | -78.305 | 104.029 | 1.00 | 57.31 | A | C |
| ATOM | 1982 | CA | PRO | A | 372 | 231.260 | -78.365 | 101.659 | 1.00 | 57.19 | A | C |
| ATOM | 1983 | CB | PRO | A | 372 | 230.522 | -77.231 | 102.348 | 1.00 | 55.89 | A | C |
| ATOM | 1984 | CG | PRO | A | 372 | 231.448 | -76.927 | 103.522 | 1.00 | 60.48 | A | C |
| ATOM | 1985 | C | PRO | A | 372 | 232.227 | -77.848 | 100.593 | 1.00 | 59.74 | A | C |
| ATOM | 1986 | O | PRO | A | 372 | 233.424 | -77.896 | 100.753 | 1.00 | 60.73 | A | O |
| ATOM | 1987 | N | MET | A | 373 | 231.685 | -77.356 | 99.497 | 1.00 | 66.48 | A | N |
| ATOM | 1988 | CA | MET | A | 373 | 232.482 | -76.838 | 98.412 | 1.00 | 72.53 | A | C |
| ATOM | 1989 | CB | MET | A | 373 | 231.763 | -77.051 | 97.082 | 1.00 | 78.23 | A | C |
| ATOM | 1990 | CG | MET | A | 373 | 232.541 | -77.969 | 96.165 | 1.00 | 91.60 | A | C |
| ATOM | 1991 | SD | MET | A | 373 | 231.857 | -78.033 | 94.463 | 1.00 | 92.28 | A | S |
| ATOM | 1992 | CE | MET | A | 373 | 230.337 | -78.924 | 94.769 | 1.00 | 97.23 | A | C |
| ATOM | 1993 | C | MET | A | 373 | 232.631 | -75.339 | 98.682 | 1.00 | 69.48 | A | C |
| ATOM | 1994 | O | MET | A | 373 | 231.861 | -74.740 | 99.424 | 1.00 | 71.05 | A | O |
| ATOM | 1995 | N | LEU | A | 374 | 233.618 | -74.722 | 98.060 | 1.00 | 66.97 | A | N |
| ATOM | 1996 | CA | LEU | A | 374 | 233.847 | -73.303 | 98.261 | 1.00 | 65.90 | A | C |
| ATOM | 1997 | CB | LEU | A | 374 | 235.155 | -72.857 | 97.562 | 1.00 | 58.73 | A | C |
| ATOM | 1998 | CG | LEU | A | 374 | 236.446 | -73.311 | 98.258 | 1.00 | 51.64 | A | C |
| ATOM | 1999 | CD1 | LEU | A | 374 | 237.625 | -73.104 | 97.321 | 1.00 | 47.33 | A | C |
| ATOM | 2000 | CD2 | LEU | A | 374 | 236.629 | -72.531 | 99.548 | 1.00 | 52.27 | A | C |
| ATOM | 2001 | C | LEU | A | 374 | 232.660 | -72.469 | 97.798 | 1.00 | 67.13 | A | C |
| ATOM | 2002 | O | LEU | A | 374 | 232.500 | -71.320 | 98.219 | 1.00 | 75.20 | A | O |
| ATOM | 2003 | N | ARG | A | 375 | 231.814 | -73.025 | 96.939 | 1.00 | 67.09 | A | N |
| ATOM | 2004 | CA | ARG | A | 375 | 230.654 | -72.254 | 96.482 | 1.00 | 63.14 | A | C |
| ATOM | 2005 | CB | ARG | A | 375 | 230.122 | -72.780 | 95.162 | 1.00 | 60.43 | A | C |
| ATOM | 2006 | C | ARG | A | 375 | 229.561 | -72.275 | 97.541 | 1.00 | 63.36 | A | C |
| ATOM | 2007 | O | ARG | A | 375 | 228.882 | -71.261 | 97.734 | 1.00 | 64.17 | A | O |
| ATOM | 2008 | N | GLU | A | 376 | 229.413 | -73.397 | 98.245 | 1.00 | 56.91 | A | N |
| ATOM | 2009 | CA | GLU | A | 376 | 228.404 | -73.501 | 99.306 | 1.00 | 64.22 | A | C |
| ATOM | 2010 | CB | GLU | A | 376 | 228.314 | -74.947 | 99.815 | 1.00 | 67.11 | A | C |
| ATOM | 2011 | CG | GLU | A | 376 | 227.797 | -75.921 | 98.783 | 1.00 | 81.78 | A | C |
| ATOM | 2012 | CD | GLU | A | 376 | 228.016 | -77.372 | 99.187 | 1.00 | 87.25 | A | C |
| ATOM | 2013 | OE1 | GLU | A | 376 | 229.137 | -77.887 | 98.974 | 1.00 | 95.99 | A | O |
| ATOM | 2014 | OE2 | GLU | A | 376 | 227.073 | -78.001 | 99.732 | 1.00 | 98.67 | A | O |
| ATOM | 2015 | C | GLU | A | 376 | 228.791 | -72.562 | 100.461 | 1.00 | 61.59 | A | C |
| ATOM | 2016 | O | GLU | A | 376 | 227.950 | -72.145 | 101.275 | 1.00 | 63.73 | A | O |
| ATOM | 2017 | N | VAL | A | 377 | 230.078 | -72.229 | 100.505 | 1.00 | 60.90 | A | N |
| ATOM | 2018 | CA | VAL | A | 377 | 230.605 | -71.361 | 101.539 | 1.00 | 60.11 | A | C |
| ATOM | 2019 | CB | VAL | A | 377 | 232.149 | -71.606 | 101.780 | 1.00 | 57.13 | A | C |
| ATOM | 2020 | CG1 | VAL | A | 377 | 232.701 | -70.591 | 102.788 | 1.00 | 52.18 | A | C |
| ATOM | 2021 | CG2 | VAL | A | 377 | 232.364 | -72.987 | 102.341 | 1.00 | 51.22 | A | C |
| ATOM | 2022 | C | VAL | A | 377 | 230.354 | -69.928 | 101.140 | 1.00 | 59.92 | A | C |

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|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 2023 | O | VAL | A | 377 | 229.915 | -69.114 | 101.952 | 1.00 | 69.33 | A | O |
| ATOM | 2024 | N | LEU | A | 378 | 230.639 | -69.625 | 99.884 | 1.00 | 54.97 | A | N |
| ATOM | 2025 | CA | LEU | A | 378 | 230.466 | -68.269 | 99.384 | 1.00 | 57.61 | A | C |
| ATOM | 2026 | CB | LEU | A | 378 | 231.178 | -68.090 | 98.026 | 1.00 | 55.37 | A | C |
| ATOM | 2027 | CG | LEU | A | 378 | 232.564 | -67.442 | 97.937 | 1.00 | 56.77 | A | C |
| ATOM | 2028 | CD1 | LEU | A | 378 | 232.986 | -66.902 | 99.309 | 1.00 | 59.47 | A | C |
| ATOM | 2029 | CD2 | LEU | A | 378 | 233.517 | -68.445 | 97.421 | 1.00 | 52.34 | A | C |
| ATOM | 2030 | C | LEU | A | 378 | 228.995 | -67.925 | 99.248 | 1.00 | 53.77 | A | C |
| ATOM | 2031 | O | LEU | A | 378 | 228.626 | -66.775 | 99.062 | 1.00 | 56.35 | A | O |
| ATOM | 2032 | N | GLU | A | 379 | 228.144 | -68.930 | 99.367 | 1.00 | 58.84 | A | N |
| ATOM | 2033 | CA | GLU | A | 379 | 226.708 | -68.714 | 99.236 | 1.00 | 63.13 | A | C |
| ATOM | 2034 | CB | GLU | A | 379 | 226.101 | -69.720 | 98.274 | 1.00 | 65.30 | A | C |
| ATOM | 2035 | CG | GLU | A | 379 | 226.567 | -69.569 | 96.831 | 1.00 | 70.53 | A | C |
| ATOM | 2036 | CD | GLU | A | 379 | 225.831 | -70.533 | 95.895 | 1.00 | 76.21 | A | C |
| ATOM | 2037 | OE1 | GLU | A | 379 | 225.546 | -71.692 | 96.329 | 1.00 | 70.09 | A | O |
| ATOM | 2038 | OE2 | GLU | A | 379 | 225.547 | -70.124 | 94.737 | 1.00 | 76.09 | A | O |
| ATOM | 2039 | C | GLU | A | 379 | 225.991 | -68.820 | 100.555 | 1.00 | 60.26 | A | C |
| ATOM | 2040 | O | GLU | A | 379 | 224.963 | -68.191 | 100.746 | 1.00 | 70.86 | A | O |
| ATOM | 2041 | N | HIS | A | 380 | 226.535 | -69.606 | 101.468 | 1.00 | 54.34 | A | N |
| ATOM | 2042 | CA | HIS | A | 380 | 225.921 | -69.775 | 102.771 | 1.00 | 54.61 | A | C |
| ATOM | 2043 | CB | HIS | A | 380 | 226.975 | -70.234 | 103.793 | 1.00 | 48.39 | A | C |
| ATOM | 2044 | CG | HIS | A | 380 | 226.402 | -70.617 | 105.121 | 1.00 | 45.24 | A | C |
| ATOM | 2045 | CD2 | HIS | A | 380 | 226.402 | -71.793 | 105.781 | 1.00 | 42.14 | A | C |
| ATOM | 2046 | ND1 | HIS | A | 380 | 225.711 | -69.731 | 105.921 | 1.00 | 51.46 | A | N |
| ATOM | 2047 | CE1 | HIS | A | 380 | 225.309 | -70.349 | 107.018 | 1.00 | 50.98 | A | C |
| ATOM | 2048 | NE2 | HIS | A | 380 | 225.715 | -71.604 | 106.957 | 1.00 | 47.24 | A | N |
| ATOM | 2049 | C | HIS | A | 380 | 225.231 | -68.502 | 103.261 | 1.00 | 55.95 | A | C |
| ATOM | 2050 | O | HIS | A | 380 | 225.807 | -67.409 | 103.206 | 1.00 | 60.83 | A | O |
| ATOM | 2051 | N | PRO | A | 381 | 223.970 | -68.630 | 103.727 | 1.00 | 55.60 | A | N |
| ATOM | 2052 | CD | PRO | A | 381 | 223.229 | -69.910 | 103.809 | 1.00 | 51.69 | A | C |
| ATOM | 2053 | CA | PRO | A | 381 | 223.147 | -67.522 | 104.248 | 1.00 | 53.48 | A | C |
| ATOM | 2054 | CB | PRO | A | 381 | 221.997 | -68.257 | 104.936 | 1.00 | 49.53 | A | C |
| ATOM | 2055 | CG | PRO | A | 381 | 221.820 | -69.442 | 104.035 | 1.00 | 49.24 | A | C |
| ATOM | 2056 | C | PRO | A | 381 | 223.875 | -66.545 | 105.212 | 1.00 | 56.98 | A | C |
| ATOM | 2057 | O | PRO | A | 381 | 223.758 | -65.320 | 105.074 | 1.00 | 59.03 | A | O |
| ATOM | 2058 | N | TRP | A | 382 | 224.635 | -67.091 | 106.164 | 1.00 | 54.77 | A | N |
| ATOM | 2059 | CA | TRP | A | 382 | 225.340 | -66.282 | 107.146 | 1.00 | 55.06 | A | C |
| ATOM | 2060 | CB | TRP | A | 382 | 225.971 | -67.165 | 108.240 | 1.00 | 54.64 | A | C |
| ATOM | 2061 | CG | TRP | A | 382 | 226.691 | -66.368 | 109.261 | 1.00 | 55.47 | A | C |
| ATOM | 2062 | CD2 | TRP | A | 382 | 228.111 | -66.195 | 109.372 | 1.00 | 58.05 | A | C |
| ATOM | 2063 | CE2 | TRP | A | 382 | 228.344 | -65.342 | 110.476 | 1.00 | 60.80 | A | C |
| ATOM | 2064 | CE3 | TRP | A | 382 | 229.210 | -66.680 | 108.649 | 1.00 | 60.95 | A | C |
| ATOM | 2065 | CD1 | TRP | A | 382 | 226.137 | -65.634 | 110.266 | 1.00 | 58.89 | A | C |
| ATOM | 2066 | NE1 | TRP | A | 382 | 227.123 | -65.011 | 111.004 | 1.00 | 59.37 | A | N |
| ATOM | 2067 | CZ2 | TRP | A | 382 | 229.632 | -64.965 | 110.871 | 1.00 | 64.01 | A | C |
| ATOM | 2068 | CZ3 | TRP | A | 382 | 230.491 | -66.302 | 109.042 | 1.00 | 60.80 | A | C |
| ATOM | 2069 | CH2 | TRP | A | 382 | 230.688 | -65.458 | 110.140 | 1.00 | 65.05 | A | C |
| ATOM | 2070 | C | TRP | A | 382 | 226.397 | -65.476 | 106.455 | 1.00 | 50.36 | A | C |
| ATOM | 2071 | O | TRP | A | 382 | 226.579 | -64.300 | 106.749 | 1.00 | 56.46 | A | O |
| ATOM | 2072 | N | ILE | A | 383 | 227.094 | -66.115 | 105.527 | 1.00 | 50.17 | A | N |
| ATOM | 2073 | CA | ILE | A | 383 | 228.163 | -65.454 | 104.757 | 1.00 | 51.21 | A | C |
| ATOM | 2074 | CB | ILE | A | 383 | 228.914 | -66.460 | 103.856 | 1.00 | 42.86 | A | C |
| ATOM | 2075 | CG2 | ILE | A | 383 | 229.642 | -65.709 | 102.766 | 1.00 | 42.15 | A | C |
| ATOM | 2076 | CG1 | ILE | A | 383 | 229.846 | -67.329 | 104.708 | 1.00 | 40.04 | A | C |
| ATOM | 2077 | CD1 | ILE | A | 383 | 230.943 | -66.520 | 105.429 | 1.00 | 40.46 | A | C |
| ATOM | 2078 | C | ILE | A | 383 | 227.659 | -64.305 | 103.873 | 1.00 | 52.36 | A | C |
| ATOM | 2079 | O | ILE | A | 383 | 228.247 | -63.229 | 103.858 | 1.00 | 51.23 | A | O |
| ATOM | 2080 | N | THR | A | 384 | 226.553 | -64.533 | 103.166 | 1.00 | 54.23 | A | N |
| ATOM | 2081 | CA | THR | A | 384 | 225.978 | -63.535 | 102.275 | 1.00 | 58.09 | A | C |
| ATOM | 2082 | CB | THR | A | 384 | 225.046 | -64.197 | 101.265 | 1.00 | 57.25 | A | C |
| ATOM | 2083 | OG1 | THR | A | 384 | 224.320 | -65.235 | 101.920 | 1.00 | 65.44 | A | O |
| ATOM | 2084 | CG2 | THR | A | 384 | 225.809 | -64.804 | 100.133 | 1.00 | 59.94 | A | C |
| ATOM | 2085 | C | THR | A | 384 | 225.221 | -62.436 | 102.988 | 1.00 | 57.62 | A | C |
| ATOM | 2086 | O | THR | A | 384 | 224.929 | -61.395 | 102.420 | 1.00 | 61.64 | A | O |
| ATOM | 2087 | N | ALA | A | 385 | 224.911 | -62.655 | 104.249 | 1.00 | 60.34 | A | N |
| ATOM | 2088 | CA | ALA | A | 385 | 224.195 | -61.658 | 105.030 | 1.00 | 57.14 | A | C |
| ATOM | 2089 | CB | ALA | A | 385 | 223.197 | -62.376 | 105.944 | 1.00 | 61.04 | A | C |
| ATOM | 2090 | C | ALA | A | 385 | 225.112 | -60.735 | 105.867 | 1.00 | 57.68 | A | C |
| ATOM | 2091 | O | ALA | A | 385 | 224.644 | -59.765 | 106.467 | 1.00 | 56.76 | A | O |
| ATOM | 2092 | N | ASN | A | 386 | 226.405 | -61.038 | 105.919 | 1.00 | 57.22 | A | N |

| | | | | | | | | | | | | |
|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|----|
| ATOM | 2093 | CA | ASN | A | 386 | 227.312 | -60.217 | 106.705 | 1.00 | 59.50 | A | C |
| ATOM | 2094 | CB | ASN | A | 386 | 227.751 | -60.993 | 107.939 | 1.00 | 58.18 | A | C |
| ATOM | 2095 | CG | ASN | A | 386 | 226.583 | -61.313 | 108.874 | 1.00 | 60.78 | A | C |
| ATOM | 2096 | OD1 | ASN | A | 386 | 226.026 | -60.419 | 109.536 | 1.00 | 55.54 | A | O |
| ATOM | 2097 | ND2 | ASN | A | 386 | 226.201 | -62.591 | 108.923 | 1.00 | 55.70 | A | N |
| ATOM | 2098 | C | ASN | A | 386 | 228.540 | -59.733 | 105.965 | 1.00 | 55.04 | A | C |
| ATOM | 2099 | O | ASN | A | 386 | 229.128 | -58.723 | 106.336 | 1.00 | 58.67 | A | O |
| ATOM | 2100 | N | SER | A | 387 | 228.903 | -60.444 | 104.906 | 1.00 | 58.95 | A | N |
| ATOM | 2101 | CA | SER | A | 387 | 230.095 | -60.110 | 104.132 | 1.00 | 63.83 | A | C |
| ATOM | 2102 | CB | SER | A | 387 | 230.472 | -61.278 | 103.220 | 1.00 | 55.03 | A | C |
| ATOM | 2103 | OG | SER | A | 387 | 231.719 | -61.061 | 102.599 | 1.00 | 57.80 | A | O |
| ATOM | 2104 | C | SER | A | 387 | 229.865 | -58.867 | 103.278 | 1.00 | 64.86 | A | C |
| ATOM | 2105 | O | SER | A | 387 | 228.745 | -58.607 | 102.826 | 1.00 | 68.20 | A | O |
| ATOM | 2106 | N | SER | A | 388 | 230.916 | -58.091 | 103.063 | 1.00 | 67.77 | A | N |
| ATOM | 2107 | CA | SER | A | 388 | 230.786 | -56.912 | 102.251 | 1.00 | 71.39 | A | C |
| ATOM | 2108 | CB | SER | A | 388 | 231.430 | -55.722 | 102.969 | 1.00 | 71.24 | A | C |
| ATOM | 2109 | OG | SER | A | 388 | 232.815 | -55.916 | 103.141 | 1.00 | 79.50 | A | O |
| ATOM | 2110 | C | SER | A | 388 | 231.403 | -57.150 | 100.872 | 1.00 | 71.24 | A | C |
| ATOM | 2111 | O | SER | A | 388 | 231.024 | -56.501 | 99.909 | 1.00 | 76.22 | A | O |
| ATOM | 2112 | N | LYS | A | 389 | 232.336 | -58.091 | 100.767 | 1.00 | 70.18 | A | N |
| ATOM | 2113 | CA | LYS | A | 389 | 232.951 | -58.347 | 99.475 | 1.00 | 67.46 | A | C |
| ATOM | 2114 | CB | LYS | A | 389 | 234.459 | -58.686 | 99.667 | 1.00 | 49.89 | A | C |
| ATOM | 2115 | C | LYS | A | 389 | 232.216 | -59.459 | 98.688 | 1.00 | 68.81 | A | C |
| ATOM | 2116 | O | LYS | A | 389 | 231.441 | -60.236 | 99.337 | 1.00 | 76.61 | A | O |
| ATOM | 2117 | OXT | LYS | A | 389 | 232.453 | -59.564 | 97.435 | 1.00 | 76.72 | A | O |
| ATOM | 2118 | PB | ADP | S | 531 | 257.416 | -68.553 | 107.649 | 1.00 | 34.84 | S | P |
| ATOM | 2119 | O1B | ADP | S | 531 | 258.545 | -67.776 | 107.191 | 1.00 | 50.81 | S | O |
| ATOM | 2120 | O2B | ADP | S | 531 | 257.209 | -69.880 | 106.879 | 1.00 | 48.35 | S | O |
| ATOM | 2121 | O3B | ADP | S | 531 | 257.422 | -68.756 | 109.226 | 1.00 | 53.79 | S | O |
| ATOM | 2122 | PA | ADP | S | 531 | 256.077 | -66.204 | 106.616 | 1.00 | 35.25 | S | P |
| ATOM | 2123 | O1A | ADP | S | 531 | 256.842 | -66.123 | 105.373 | 1.00 | 33.66 | S | O |
| ATOM | 2124 | O2A | ADP | S | 531 | 254.551 | -65.860 | 106.461 | 1.00 | 54.13 | S | O |
| ATOM | 2125 | O3A | ADP | S | 531 | 256.162 | -67.643 | 107.261 | 1.00 | 62.78 | S | O |
| ATOM | 2126 | O5* | ADP | S | 531 | 256.892 | -65.243 | 107.657 | 1.00 | 48.32 | S | O |
| ATOM | 2127 | C5* | ADP | S | 531 | 256.442 | -65.218 | 109.085 | 1.00 | 61.70 | S | C |
| ATOM | 2128 | C4* | ADP | S | 531 | 255.856 | -63.898 | 109.556 | 1.00 | 46.54 | S | C |
| ATOM | 2129 | O4* | ADP | S | 531 | 256.542 | -62.868 | 108.818 | 1.00 | 44.98 | S | O |
| ATOM | 2130 | C3* | ADP | S | 531 | 254.372 | -63.620 | 109.292 | 1.00 | 37.55 | S | C |
| ATOM | 2131 | O3* | ADP | S | 531 | 253.658 | -64.161 | 110.347 | 1.00 | 46.23 | S | O |
| ATOM | 2132 | C2* | ADP | S | 531 | 254.337 | -62.080 | 109.181 | 1.00 | 46.36 | S | C |
| ATOM | 2133 | O2* | ADP | S | 531 | 254.148 | -61.399 | 110.423 | 1.00 | 42.59 | S | O |
| ATOM | 2134 | C1* | ADP | S | 531 | 255.710 | -61.716 | 108.597 | 1.00 | 43.16 | S | C |
| ATOM | 2135 | N9 | ADP | S | 531 | 255.666 | -61.436 | 107.162 | 1.00 | 48.23 | S | N |
| ATOM | 2136 | C8 | ADP | S | 531 | 255.946 | -62.302 | 106.136 | 1.00 | 47.43 | S | C |
| ATOM | 2137 | N7 | ADP | S | 531 | 255.811 | -61.734 | 104.897 | 1.00 | 42.83 | S | N |
| ATOM | 2138 | C5 | ADP | S | 531 | 255.418 | -60.464 | 105.177 | 1.00 | 40.36 | S | C |
| ATOM | 2139 | C6 | ADP | S | 531 | 255.122 | -59.337 | 104.279 | 1.00 | 44.75 | S | C |
| ATOM | 2140 | N6 | ADP | S | 531 | 255.151 | -59.400 | 102.949 | 1.00 | 22.67 | S | N |
| ATOM | 2141 | N1 | ADP | S | 531 | 254.762 | -58.153 | 104.964 | 1.00 | 40.38 | S | N |
| ATOM | 2142 | C2 | ADP | S | 531 | 254.725 | -58.057 | 106.364 | 1.00 | 50.55 | S | C |
| ATOM | 2143 | N3 | ADP | S | 531 | 254.992 | -59.070 | 107.188 | 1.00 | 51.07 | S | N |
| ATOM | 2144 | C4 | ADP | S | 531 | 255.351 | -60.245 | 106.574 | 1.00 | 46.49 | S | C |
| ATOM | 2145 | MG | MG2 | X | 1 | 254.502 | -68.175 | 108.413 | 1.00 | 47.20 | X | MG |
| ATOM | 2146 | MG | MG2 | X | 2 | 255.864 | -71.389 | 106.282 | 1.00 | 52.14 | X | MG |
| ATOM | 2147 | OH2 | WAT | W | 1 | 264.531 | -71.881 | 94.078 | 1.00 | 38.88 | W | O |
| ATOM | 2148 | OH2 | WAT | W | 2 | 242.403 | -78.272 | 113.237 | 1.00 | 54.89 | W | O |
| ATOM | 2149 | OH2 | WAT | W | 3 | 232.705 | -62.634 | 117.460 | 1.00 | 37.08 | W | O |
| ATOM | 2150 | OH2 | WAT | W | 4 | 251.977 | -73.020 | 102.685 | 1.00 | 62.00 | W | O |
| ATOM | 2151 | OH2 | WAT | W | 5 | 275.163 | -72.604 | 97.774 | 1.00 | 53.95 | W | O |
| ATOM | 2152 | OH2 | WAT | W | 6 | 232.526 | -85.909 | 111.573 | 1.00 | 35.05 | W | O |
| ATOM | 2153 | OH2 | WAT | W | 7 | 259.170 | -71.102 | 103.608 | 1.00 | 40.42 | W | O |
| ATOM | 2154 | OH2 | WAT | W | 8 | 249.904 | -55.205 | 99.315 | 1.00 | 26.87 | W | O |
| ATOM | 2155 | OH2 | WAT | W | 9 | 229.701 | -63.236 | 117.265 | 1.00 | 25.50 | W | O |

Fig. 6

Table B

| | | | | | | | | | | | | |
|------|----|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 1 | CB | SER | A | 123 | 174.078 | 193.853 | 20.627 | 1.00 | 33.78 | A | C |
| ATOM | 2 | OG | SER | A | 123 | 173.358 | 193.080 | 21.584 | 1.00 | 34.86 | A | O |
| ATOM | 3 | C | SER | A | 123 | 173.331 | 195.751 | 21.954 | 1.00 | 32.28 | A | C |
| ATOM | 4 | O | SER | A | 123 | 174.318 | 196.187 | 22.580 | 1.00 | 32.38 | A | O |
| ATOM | 5 | N | SER | A | 123 | 174.192 | 196.109 | 19.556 | 1.00 | 32.09 | A | N |
| ATOM | 6 | CA | SER | A | 123 | 173.449 | 195.246 | 20.532 | 1.00 | 33.80 | A | C |
| ATOM | 7 | N | LYS | A | 124 | 172.107 | 195.682 | 22.463 | 1.00 | 30.56 | A | N |
| ATOM | 8 | CA | LYS | A | 124 | 171.860 | 196.059 | 23.849 | 1.00 | 31.07 | A | C |
| ATOM | 9 | CB | LYS | A | 124 | 170.483 | 196.727 | 24.005 | 1.00 | 31.64 | A | C |
| ATOM | 10 | CG | LYS | A | 124 | 170.231 | 197.847 | 23.021 | 1.00 | 33.77 | A | C |
| ATOM | 11 | CD | LYS | A | 124 | 168.734 | 198.157 | 22.847 | 1.00 | 35.14 | A | C |
| ATOM | 12 | CE | LYS | A | 124 | 168.571 | 198.989 | 21.582 | 1.00 | 38.52 | A | C |
| ATOM | 13 | NZ | LYS | A | 124 | 167.170 | 199.182 | 21.123 | 1.00 | 40.74 | A | N |
| ATOM | 14 | C | LYS | A | 124 | 171.929 | 194.785 | 24.714 | 1.00 | 30.29 | A | C |
| ATOM | 15 | O | LYS | A | 124 | 171.724 | 194.845 | 25.913 | 1.00 | 30.99 | A | O |
| ATOM | 16 | N | LYS | A | 125 | 172.256 | 193.646 | 24.102 | 1.00 | 30.71 | A | N |
| ATOM | 17 | CA | LYS | A | 125 | 172.352 | 192.375 | 24.835 | 1.00 | 29.50 | A | C |
| ATOM | 18 | CB | LYS | A | 125 | 171.942 | 191.210 | 23.951 | 1.00 | 32.42 | A | C |
| ATOM | 19 | CG | LYS | A | 125 | 170.496 | 191.147 | 23.609 | 1.00 | 35.74 | A | C |
| ATOM | 20 | CD | LYS | A | 125 | 170.221 | 189.915 | 22.777 | 1.00 | 38.96 | A | C |
| ATOM | 21 | CE | LYS | A | 125 | 168.757 | 189.905 | 22.351 | 1.00 | 44.54 | A | C |
| ATOM | 22 | NZ | LYS | A | 125 | 168.305 | 188.576 | 21.807 | 1.00 | 44.21 | A | N |
| ATOM | 23 | C | LYS | A | 125 | 173.728 | 192.027 | 25.381 | 1.00 | 26.48 | A | C |
| ATOM | 24 | O | LYS | A | 125 | 174.769 | 192.438 | 24.859 | 1.00 | 24.13 | A | O |
| ATOM | 25 | N | ARG | A | 126 | 173.713 | 191.215 | 26.421 | 1.00 | 24.15 | A | N |
| ATOM | 26 | CA | ARG | A | 126 | 174.952 | 190.756 | 27.020 | 1.00 | 22.33 | A | C |
| ATOM | 27 | CB | ARG | A | 126 | 174.636 | 189.835 | 28.191 | 1.00 | 21.13 | A | C |
| ATOM | 28 | CG | ARG | A | 126 | 175.841 | 189.331 | 28.897 | 1.00 | 18.73 | A | C |
| ATOM | 29 | CD | ARG | A | 126 | 175.395 | 188.263 | 29.847 | 1.00 | 19.74 | A | C |
| ATOM | 30 | NE | ARG | A | 126 | 176.552 | 187.628 | 30.420 | 1.00 | 16.73 | A | N |
| ATOM | 31 | CZ | ARG | A | 126 | 176.503 | 186.741 | 31.394 | 1.00 | 17.59 | A | C |
| ATOM | 32 | NH1 | ARG | A | 126 | 175.331 | 186.391 | 31.902 | 1.00 | 16.71 | A | N |
| ATOM | 33 | NH2 | ARG | A | 126 | 177.633 | 186.214 | 31.854 | 1.00 | 18.45 | A | N |
| ATOM | 34 | C | ARG | A | 126 | 175.752 | 189.995 | 25.943 | 1.00 | 22.44 | A | C |
| ATOM | 35 | O | ARG | A | 126 | 175.252 | 189.077 | 25.296 | 1.00 | 20.29 | A | O |
| ATOM | 36 | N | GLN | A | 127 | 176.997 | 190.406 | 25.763 | 1.00 | 21.10 | A | N |
| ATOM | 37 | CA | GLN | A | 127 | 177.904 | 189.815 | 24.787 | 1.00 | 19.12 | A | C |
| ATOM | 38 | CB | GLN | A | 127 | 178.707 | 190.934 | 24.102 | 1.00 | 18.99 | A | C |
| ATOM | 39 | CG | GLN | A | 127 | 177.842 | 191.925 | 23.355 | 1.00 | 15.64 | A | C |
| ATOM | 40 | CD | GLN | A | 127 | 177.154 | 191.297 | 22.162 | 1.00 | 17.04 | A | C |
| ATOM | 41 | OE1 | GLN | A | 127 | 177.748 | 191.151 | 21.093 | 1.00 | 21.45 | A | O |
| ATOM | 42 | NE2 | GLN | A | 127 | 175.902 | 190.912 | 22.339 | 1.00 | 20.66 | A | N |
| ATOM | 43 | C | GLN | A | 127 | 178.861 | 188.861 | 25.496 | 1.00 | 17.70 | A | C |
| ATOM | 44 | O | GLN | A | 127 | 179.049 | 188.941 | 26.715 | 1.00 | 13.46 | A | O |
| ATOM | 45 | N | TRP | A | 128 | 179.460 | 187.956 | 24.735 | 1.00 | 16.62 | A | N |
| ATOM | 46 | CA | TRP | A | 128 | 180.411 | 187.014 | 25.303 | 1.00 | 14.25 | A | C |
| ATOM | 47 | CB | TRP | A | 128 | 180.890 | 186.029 | 24.237 | 1.00 | 13.22 | A | C |
| ATOM | 48 | CG | TRP | A | 128 | 179.858 | 185.060 | 23.779 | 1.00 | 9.34 | A | C |
| ATOM | 49 | CD2 | TRP | A | 128 | 179.264 | 184.022 | 24.557 | 1.00 | 13.44 | A | C |
| ATOM | 50 | CE2 | TRP | A | 128 | 178.396 | 183.304 | 23.704 | 1.00 | 11.84 | A | C |
| ATOM | 51 | CE3 | TRP | A | 128 | 179.389 | 183.618 | 25.899 | 1.00 | 15.05 | A | C |
| ATOM | 52 | CD1 | TRP | A | 128 | 179.338 | 184.945 | 22.529 | 1.00 | 11.79 | A | C |
| ATOM | 53 | NE1 | TRP | A | 128 | 178.460 | 183.893 | 22.469 | 1.00 | 12.24 | A | N |
| ATOM | 54 | CZ2 | TRP | A | 128 | 177.648 | 182.204 | 24.146 | 1.00 | 10.99 | A | C |
| ATOM | 55 | CZ3 | TRP | A | 128 | 178.646 | 182.523 | 26.336 | 1.00 | 15.81 | A | C |
| ATOM | 56 | CH2 | TRP | A | 128 | 177.789 | 181.828 | 25.457 | 1.00 | 13.35 | A | C |
| ATOM | 57 | C | TRP | A | 128 | 181.611 | 187.777 | 25.855 | 1.00 | 16.17 | A | C |
| ATOM | 58 | O | TRP | A | 128 | 181.885 | 188.903 | 25.457 | 1.00 | 17.48 | A | O |
| ATOM | 59 | N | ALA | A | 129 | 182.306 | 187.146 | 26.790 | 1.00 | 17.32 | A | N |
| ATOM | 60 | CA | ALA | A | 129 | 183.501 | 187.695 | 27.415 | 1.00 | 17.26 | A | C |
| ATOM | 61 | CB | ALA | A | 129 | 183.129 | 188.595 | 28.576 | 1.00 | 8.15 | A | C |
| ATOM | 62 | C | ALA | A | 129 | 184.303 | 186.478 | 27.906 | 1.00 | 17.06 | A | C |
| ATOM | 63 | O | ALA | A | 129 | 183.733 | 185.426 | 28.198 | 1.00 | 17.77 | A | O |

| | | | | | | | | | | | | |
|------|-----|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 64 | N | LEU | A | 130 | 185.618 | 186.620 | 27.979 | 1.00 | 16.79 | A | N |
| ATOM | 65 | CA | LEU | A | 130 | 186.479 | 185.540 | 28.425 | 1.00 | 19.53 | A | C |
| ATOM | 66 | CB | LEU | A | 130 | 187.943 | 186.006 | 28.392 | 1.00 | 19.86 | A | C |
| ATOM | 67 | CG | LEU | A | 130 | 189.050 | 184.967 | 28.619 | 1.00 | 22.85 | A | C |
| ATOM | 68 | CD1 | LEU | A | 130 | 188.897 | 183.839 | 27.604 | 1.00 | 17.77 | A | C |
| ATOM | 69 | CD2 | LEU | A | 130 | 190.429 | 185.631 | 28.492 | 1.00 | 16.04 | A | C |
| ATOM | 70 | C | LEU | A | 130 | 186.090 | 185.081 | 29.834 | 1.00 | 21.19 | A | C |
| ATOM | 71 | O | LEU | A | 130 | 186.080 | 183.885 | 30.121 | 1.00 | 24.25 | A | O |
| ATOM | 72 | N | GLU | A | 131 | 185.756 | 186.032 | 30.705 | 1.00 | 23.78 | A | N |
| ATOM | 73 | CA | GLU | A | 131 | 185.349 | 185.729 | 32.082 | 1.00 | 25.83 | A | C |
| ATOM | 74 | CB | GLU | A | 131 | 184.952 | 187.016 | 32.834 | 1.00 | 30.42 | A | C |
| ATOM | 75 | CG | GLU | A | 131 | 186.005 | 188.110 | 32.945 | 1.00 | 42.06 | A | C |
| ATOM | 76 | CD | GLU | A | 131 | 186.135 | 188.977 | 31.686 | 1.00 | 46.89 | A | C |
| ATOM | 77 | OE1 | GLU | A | 131 | 185.319 | 188.822 | 30.747 | 1.00 | 51.89 | A | O |
| ATOM | 78 | OE2 | GLU | A | 131 | 187.058 | 189.821 | 31.640 | 1.00 | 50.51 | A | O |
| ATOM | 79 | C | GLU | A | 131 | 184.146 | 184.751 | 32.145 | 1.00 | 25.30 | A | C |
| ATOM | 80 | O | GLU | A | 131 | 183.790 | 184.281 | 33.227 | 1.00 | 21.67 | A | O |
| ATOM | 81 | N | ASP | A | 132 | 183.503 | 184.473 | 31.008 | 1.00 | 22.51 | A | N |
| ATOM | 82 | CA | ASP | A | 132 | 182.364 | 183.565 | 30.989 | 1.00 | 22.54 | A | C |
| ATOM | 83 | CB | ASP | A | 132 | 181.458 | 183.825 | 29.782 | 1.00 | 24.79 | A | C |
| ATOM | 84 | CG | ASP | A | 132 | 180.631 | 185.120 | 29.908 | 1.00 | 28.99 | A | C |
| ATOM | 85 | OD1 | ASP | A | 132 | 180.136 | 185.417 | 31.025 | 1.00 | 29.67 | A | O |
| ATOM | 86 | OD2 | ASP | A | 132 | 180.450 | 185.824 | 28.873 | 1.00 | 26.45 | A | O |
| ATOM | 87 | C | ASP | A | 132 | 182.752 | 182.087 | 30.966 | 1.00 | 21.99 | A | C |
| ATOM | 88 | O | ASP | A | 132 | 181.925 | 181.226 | 31.267 | 1.00 | 22.12 | A | O |
| ATOM | 89 | N | PHE | A | 133 | 183.998 | 181.781 | 30.625 | 1.00 | 23.02 | A | N |
| ATOM | 90 | CA | PHE | A | 133 | 184.411 | 180.378 | 30.554 | 1.00 | 22.89 | A | C |
| ATOM | 91 | CB | PHE | A | 133 | 184.812 | 179.998 | 29.111 | 1.00 | 18.64 | A | C |
| ATOM | 92 | CG | PHE | A | 133 | 183.901 | 180.565 | 28.039 | 1.00 | 17.41 | A | C |
| ATOM | 93 | CD1 | PHE | A | 133 | 184.042 | 181.884 | 27.616 | 1.00 | 15.80 | A | C |
| ATOM | 94 | CD2 | PHE | A | 133 | 182.904 | 179.783 | 27.456 | 1.00 | 16.46 | A | C |
| ATOM | 95 | CE1 | PHE | A | 133 | 183.215 | 182.414 | 26.637 | 1.00 | 14.66 | A | C |
| ATOM | 96 | CE2 | PHE | A | 133 | 182.063 | 180.305 | 26.466 | 1.00 | 15.10 | A | C |
| ATOM | 97 | CZ | PHE | A | 133 | 182.224 | 181.626 | 26.060 | 1.00 | 18.42 | A | C |
| ATOM | 98 | C | PHE | A | 133 | 185.557 | 179.984 | 31.484 | 1.00 | 22.91 | A | C |
| ATOM | 99 | O | PHE | A | 133 | 186.466 | 180.766 | 31.755 | 1.00 | 24.66 | A | O |
| ATOM | 100 | N | GLU | A | 134 | 185.484 | 178.767 | 32.005 | 1.00 | 22.49 | A | N |
| ATOM | 101 | CA | GLU | A | 134 | 186.566 | 178.248 | 32.814 | 1.00 | 21.74 | A | C |
| ATOM | 102 | CB | GLU | A | 134 | 186.054 | 177.264 | 33.870 | 1.00 | 23.93 | A | C |
| ATOM | 103 | CG | GLU | A | 134 | 185.401 | 177.912 | 35.088 | 1.00 | 29.62 | A | C |
| ATOM | 104 | CD | GLU | A | 134 | 184.751 | 176.887 | 36.020 | 1.00 | 37.53 | A | C |
| ATOM | 105 | OE1 | GLU | A | 134 | 185.460 | 175.983 | 36.533 | 1.00 | 38.84 | A | O |
| ATOM | 106 | OE2 | GLU | A | 134 | 183.517 | 176.974 | 36.236 | 1.00 | 43.58 | A | O |
| ATOM | 107 | C | GLU | A | 134 | 187.313 | 177.528 | 31.695 | 1.00 | 21.49 | A | C |
| ATOM | 108 | O | GLU | A | 134 | 186.702 | 176.784 | 30.922 | 1.00 | 23.43 | A | O |
| ATOM | 109 | N | ILE | A | 135 | 188.608 | 177.794 | 31.564 | 1.00 | 19.74 | A | N |
| ATOM | 110 | CA | ILE | A | 135 | 189.425 | 177.197 | 30.524 | 1.00 | 19.08 | A | C |
| ATOM | 111 | CB | ILE | A | 135 | 190.554 | 178.149 | 30.072 | 1.00 | 22.58 | A | C |
| ATOM | 112 | CG2 | ILE | A | 135 | 191.285 | 177.543 | 28.866 | 1.00 | 19.44 | A | C |
| ATOM | 113 | CG1 | ILE | A | 135 | 189.990 | 179.541 | 29.762 | 1.00 | 20.52 | A | C |
| ATOM | 114 | CD1 | ILE | A | 135 | 188.876 | 179.535 | 28.771 | 1.00 | 21.85 | A | C |
| ATOM | 115 | C | ILE | A | 135 | 190.099 | 175.941 | 31.044 | 1.00 | 20.74 | A | C |
| ATOM | 116 | O | ILE | A | 135 | 190.667 | 175.944 | 32.140 | 1.00 | 19.34 | A | O |
| ATOM | 117 | N | GLY | A | 136 | 190.058 | 174.876 | 30.245 | 1.00 | 19.98 | A | N |
| ATOM | 118 | CA | GLY | A | 136 | 190.688 | 173.629 | 30.637 | 1.00 | 19.38 | A | C |
| ATOM | 119 | C | GLY | A | 136 | 191.995 | 173.397 | 29.906 | 1.00 | 18.61 | A | C |
| ATOM | 120 | O | GLY | A | 136 | 192.742 | 174.324 | 29.668 | 1.00 | 20.61 | A | O |
| ATOM | 121 | N | ARG | A | 137 | 192.267 | 172.156 | 29.533 | 1.00 | 22.50 | A | N |
| ATOM | 122 | CA | ARG | A | 137 | 193.500 | 171.827 | 28.833 | 1.00 | 22.75 | A | C |
| ATOM | 123 | CB | ARG | A | 137 | 193.771 | 170.325 | 28.920 | 1.00 | 22.49 | A | C |
| ATOM | 124 | CG | ARG | A | 137 | 192.820 | 169.474 | 28.047 | 1.00 | 20.82 | A | C |
| ATOM | 125 | CD | ARG | A | 137 | 193.107 | 168.016 | 28.252 | 1.00 | 15.70 | A | C |
| ATOM | 126 | NE | ARG | A | 137 | 192.212 | 167.104 | 27.554 | 1.00 | 14.70 | A | N |
| ATOM | 127 | CZ | ARG | A | 137 | 192.299 | 166.784 | 26.266 | 1.00 | 14.90 | A | C |
| ATOM | 128 | NH1 | ARG | A | 137 | 193.237 | 167.305 | 25.493 | 1.00 | 13.75 | A | N |
| ATOM | 129 | NH2 | ARG | A | 137 | 191.462 | 165.900 | 25.758 | 1.00 | 13.41 | A | N |
| ATOM | 130 | C | ARG | A | 137 | 193.396 | 172.183 | 27.357 | 1.00 | 23.53 | A | C |
| ATOM | 131 | O | ARG | A | 137 | 192.316 | 172.425 | 26.840 | 1.00 | 24.10 | A | O |
| ATOM | 132 | N | PRO | A | 138 | 194.542 | 172.250 | 26.671 | 1.00 | 22.98 | A | N |
| ATOM | 133 | CD | PRO | A | 138 | 195.850 | 172.477 | 27.313 | 1.00 | 19.97 | A | C |

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|------|-----|-----|-----------|---------|---------|--------|------|-------|---|---|
| ATOM | 134 | CA | PRO A 138 | 194.613 | 172.552 | 25.237 | 1.00 | 22.67 | A | C |
| ATOM | 135 | CB | PRO A 138 | 196.116 | 172.791 | 25.007 | 1.00 | 21.39 | A | C |
| ATOM | 136 | CG | PRO A 138 | 196.570 | 173.354 | 26.295 | 1.00 | 19.67 | A | C |
| ATOM | 137 | C | PRO A 138 | 194.135 | 171.275 | 24.497 | 1.00 | 23.48 | A | C |
| ATOM | 138 | O | PRO A 138 | 194.528 | 170.147 | 24.876 | 1.00 | 21.67 | A | O |
| ATOM | 139 | N | LEU A 139 | 193.297 | 171.435 | 23.471 | 1.00 | 19.70 | A | N |
| ATOM | 140 | CA | LEU A 139 | 192.809 | 170.281 | 22.716 | 1.00 | 19.33 | A | C |
| ATOM | 141 | CB | LEU A 139 | 191.340 | 170.454 | 22.318 | 1.00 | 19.32 | A | C |
| ATOM | 142 | CG | LEU A 139 | 190.349 | 170.509 | 23.473 | 1.00 | 18.46 | A | C |
| ATOM | 143 | CD1 | LEU A 139 | 188.966 | 170.866 | 22.964 | 1.00 | 16.26 | A | C |
| ATOM | 144 | CD2 | LEU A 139 | 190.342 | 169.178 | 24.163 | 1.00 | 15.61 | A | C |
| ATOM | 145 | C | LEU A 139 | 193.636 | 170.125 | 21.454 | 1.00 | 18.97 | A | C |
| ATOM | 146 | O | LEU A 139 | 193.714 | 169.045 | 20.883 | 1.00 | 20.68 | A | O |
| ATOM | 147 | N | GLY A 140 | 194.256 | 171.215 | 21.026 | 1.00 | 19.57 | A | N |
| ATOM | 148 | CA | GLY A 140 | 195.056 | 171.181 | 19.825 | 1.00 | 16.45 | A | C |
| ATOM | 149 | C | GLY A 140 | 195.821 | 172.461 | 19.630 | 1.00 | 18.41 | A | C |
| ATOM | 150 | O | GLY A 140 | 195.560 | 173.469 | 20.280 | 1.00 | 17.66 | A | O |
| ATOM | 151 | N | LYS A 141 | 196.778 | 172.413 | 18.713 | 1.00 | 23.54 | A | N |
| ATOM | 152 | CA | LYS A 141 | 197.635 | 173.547 | 18.399 | 1.00 | 25.64 | A | C |
| ATOM | 153 | CB | LYS A 141 | 199.103 | 173.104 | 18.473 | 1.00 | 29.50 | A | C |
| ATOM | 154 | CG | LYS A 141 | 200.101 | 174.192 | 18.080 | 1.00 | 37.58 | A | C |
| ATOM | 155 | CD | LYS A 141 | 201.550 | 173.744 | 18.187 | 1.00 | 42.29 | A | C |
| ATOM | 156 | CE | LYS A 141 | 202.483 | 174.918 | 17.891 | 1.00 | 46.12 | A | C |
| ATOM | 157 | NZ | LYS A 141 | 203.914 | 174.481 | 17.890 | 1.00 | 49.84 | A | N |
| ATOM | 158 | C | LYS A 141 | 197.313 | 174.071 | 16.995 | 1.00 | 26.94 | A | C |
| ATOM | 159 | O | LYS A 141 | 197.578 | 173.409 | 15.986 | 1.00 | 26.47 | A | O |
| ATOM | 160 | N | GLY A 142 | 196.724 | 175.256 | 16.938 | 1.00 | 26.51 | A | N |
| ATOM | 161 | CA | GLY A 142 | 196.392 | 175.839 | 15.656 | 1.00 | 26.65 | A | C |
| ATOM | 162 | C | GLY A 142 | 197.515 | 176.753 | 15.234 | 1.00 | 26.71 | A | C |
| ATOM | 163 | O | GLY A 142 | 198.384 | 177.086 | 16.052 | 1.00 | 26.93 | A | O |
| ATOM | 164 | N | LYS A 143 | 197.501 | 177.158 | 13.969 | 1.00 | 24.67 | A | N |
| ATOM | 165 | CA | LYS A 143 | 198.529 | 178.037 | 13.452 | 1.00 | 22.25 | A | C |
| ATOM | 166 | CB | LYS A 143 | 198.362 | 178.220 | 11.925 | 1.00 | 25.89 | A | C |
| ATOM | 167 | CG | LYS A 143 | 199.535 | 178.982 | 11.307 | 1.00 | 30.09 | A | C |
| ATOM | 168 | CD | LYS A 143 | 199.516 | 179.060 | 9.792 | 1.00 | 35.88 | A | C |
| ATOM | 169 | CE | LYS A 143 | 200.619 | 180.037 | 9.330 | 1.00 | 41.66 | A | C |
| ATOM | 170 | NZ | LYS A 143 | 200.871 | 180.206 | 7.857 | 1.00 | 42.97 | A | N |
| ATOM | 171 | C | LYS A 143 | 198.554 | 179.404 | 14.160 | 1.00 | 22.22 | A | C |
| ATOM | 172 | O | LYS A 143 | 199.641 | 179.921 | 14.425 | 1.00 | 22.44 | A | O |
| ATOM | 173 | N | PHE A 144 | 197.394 | 179.986 | 14.477 | 1.00 | 20.35 | A | N |
| ATOM | 174 | CA | PHE A 144 | 197.370 | 181.311 | 15.130 | 1.00 | 21.42 | A | C |
| ATOM | 175 | CB | PHE A 144 | 196.429 | 182.258 | 14.362 | 1.00 | 17.68 | A | C |
| ATOM | 176 | CG | PHE A 144 | 196.798 | 182.429 | 12.896 | 1.00 | 22.16 | A | C |
| ATOM | 177 | CD1 | PHE A 144 | 196.541 | 181.421 | 11.959 | 1.00 | 20.33 | A | C |
| ATOM | 178 | CD2 | PHE A 144 | 197.460 | 183.574 | 12.464 | 1.00 | 23.47 | A | C |
| ATOM | 179 | CE1 | PHE A 144 | 196.944 | 181.564 | 10.624 | 1.00 | 20.91 | A | C |
| ATOM | 180 | CE2 | PHE A 144 | 197.864 | 183.716 | 11.128 | 1.00 | 21.10 | A | C |
| ATOM | 181 | CZ | PHE A 144 | 197.606 | 182.708 | 10.213 | 1.00 | 18.55 | A | C |
| ATOM | 182 | C | PHE A 144 | 197.001 | 181.263 | 16.626 | 1.00 | 20.47 | A | C |
| ATOM | 183 | O | PHE A 144 | 196.668 | 182.283 | 17.246 | 1.00 | 20.98 | A | O |
| ATOM | 184 | N | GLY A 145 | 197.094 | 180.072 | 17.208 | 1.00 | 18.58 | A | N |
| ATOM | 185 | CA | GLY A 145 | 196.786 | 179.915 | 18.616 | 1.00 | 19.23 | A | C |
| ATOM | 186 | C | GLY A 145 | 196.229 | 178.538 | 18.922 | 1.00 | 20.99 | A | C |
| ATOM | 187 | O | GLY A 145 | 195.911 | 177.756 | 18.016 | 1.00 | 21.28 | A | O |
| ATOM | 188 | N | ASN A 146 | 196.100 | 178.233 | 20.204 | 1.00 | 20.66 | A | N |
| ATOM | 189 | CA | ASN A 146 | 195.574 | 176.938 | 20.598 | 1.00 | 21.26 | A | C |
| ATOM | 190 | CB | ASN A 146 | 196.140 | 176.544 | 21.964 | 1.00 | 24.59 | A | C |
| ATOM | 191 | CG | ASN A 146 | 197.638 | 176.352 | 21.939 | 1.00 | 27.16 | A | C |
| ATOM | 192 | OD1 | ASN A 146 | 198.205 | 175.853 | 20.956 | 1.00 | 32.36 | A | O |
| ATOM | 193 | ND2 | ASN A 146 | 198.292 | 176.737 | 23.015 | 1.00 | 27.51 | A | N |
| ATOM | 194 | C | ASN A 146 | 194.056 | 176.878 | 20.683 | 1.00 | 20.53 | A | C |
| ATOM | 195 | O | ASN A 146 | 193.370 | 177.902 | 20.676 | 1.00 | 20.90 | A | O |
| ATOM | 196 | N | VAL A 147 | 193.540 | 175.658 | 20.740 | 1.00 | 18.03 | A | N |
| ATOM | 197 | CA | VAL A 147 | 192.121 | 175.430 | 20.922 | 1.00 | 14.64 | A | C |
| ATOM | 198 | CB | VAL A 147 | 191.528 | 174.515 | 19.799 | 1.00 | 13.96 | A | C |
| ATOM | 199 | CG1 | VAL A 147 | 190.053 | 174.217 | 20.092 | 1.00 | 10.05 | A | C |
| ATOM | 200 | CG2 | VAL A 147 | 191.669 | 175.213 | 18.439 | 1.00 | 8.41 | A | C |
| ATOM | 201 | C | VAL A 147 | 192.142 | 174.746 | 22.301 | 1.00 | 16.21 | A | C |
| ATOM | 202 | O | VAL A 147 | 192.897 | 173.783 | 22.523 | 1.00 | 14.13 | A | O |
| ATOM | 203 | N | TYR A 148 | 191.375 | 175.299 | 23.242 | 1.00 | 14.89 | A | N |

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|------|-----|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 204 | CA | TYR | A | 148 | 191.315 | 174.786 | 24.614 | 1.00 | 14.47 | A | C |
| ATOM | 205 | CB | TYR | A | 148 | 191.593 | 175.891 | 25.642 | 1.00 | 12.68 | A | C |
| ATOM | 206 | CG | TYR | A | 148 | 192.910 | 176.619 | 25.491 | 1.00 | 18.66 | A | C |
| ATOM | 207 | CD1 | TYR | A | 148 | 193.031 | 177.690 | 24.605 | 1.00 | 16.46 | A | C |
| ATOM | 208 | CE1 | TYR | A | 148 | 194.243 | 178.347 | 24.434 | 1.00 | 18.77 | A | C |
| ATOM | 209 | CD2 | TYR | A | 148 | 194.047 | 176.222 | 26.217 | 1.00 | 15.67 | A | C |
| ATOM | 210 | CE2 | TYR | A | 148 | 195.269 | 176.880 | 26.050 | 1.00 | 20.14 | A | C |
| ATOM | 211 | CZ | TYR | A | 148 | 195.355 | 177.938 | 25.153 | 1.00 | 18.86 | A | C |
| ATOM | 212 | OH | TYR | A | 148 | 196.555 | 178.569 | 24.934 | 1.00 | 23.63 | A | O |
| ATOM | 213 | C | TYR | A | 148 | 189.943 | 174.234 | 24.936 | 1.00 | 13.13 | A | C |
| ATOM | 214 | O | TYR | A | 148 | 188.942 | 174.674 | 24.386 | 1.00 | 14.07 | A | O |
| ATOM | 215 | N | LEU | A | 149 | 189.887 | 173.265 | 25.831 | 1.00 | 11.62 | A | N |
| ATOM | 216 | CA | LEU | A | 149 | 188.600 | 172.753 | 26.223 | 1.00 | 11.86 | A | C |
| ATOM | 217 | CB | LEU | A | 149 | 188.787 | 171.466 | 27.003 | 1.00 | 10.50 | A | C |
| ATOM | 218 | CG | LEU | A | 149 | 187.547 | 170.675 | 27.388 | 1.00 | 12.61 | A | C |
| ATOM | 219 | CD1 | LEU | A | 149 | 186.695 | 170.364 | 26.182 | 1.00 | 11.20 | A | C |
| ATOM | 220 | CD2 | LEU | A | 149 | 188.001 | 169.410 | 28.051 | 1.00 | 11.24 | A | C |
| ATOM | 221 | C | LEU | A | 149 | 188.071 | 173.911 | 27.101 | 1.00 | 13.55 | A | C |
| ATOM | 222 | O | LEU | A | 149 | 188.857 | 174.728 | 27.565 | 1.00 | 12.48 | A | O |
| ATOM | 223 | N | ALA | A | 150 | 186.763 | 174.008 | 27.316 | 1.00 | 14.24 | A | N |
| ATOM | 224 | CA | ALA | A | 150 | 186.227 | 175.102 | 28.120 | 1.00 | 15.20 | A | C |
| ATOM | 225 | CB | ALA | A | 150 | 186.230 | 176.406 | 27.318 | 1.00 | 15.60 | A | C |
| ATOM | 226 | C | ALA | A | 150 | 184.817 | 174.800 | 28.612 | 1.00 | 17.25 | A | C |
| ATOM | 227 | O | ALA | A | 150 | 184.122 | 173.929 | 28.083 | 1.00 | 18.30 | A | O |
| ATOM | 228 | N | ARG | A | 151 | 184.398 | 175.532 | 29.629 | 1.00 | 17.29 | A | N |
| ATOM | 229 | CA | ARG | A | 151 | 183.091 | 175.334 | 30.215 | 1.00 | 19.70 | A | C |
| ATOM | 230 | CB | ARG | A | 151 | 183.245 | 174.479 | 31.492 | 1.00 | 20.02 | A | C |
| ATOM | 231 | CG | ARG | A | 151 | 181.977 | 174.102 | 32.258 | 1.00 | 26.58 | A | C |
| ATOM | 232 | CD | ARG | A | 151 | 182.321 | 173.557 | 33.686 | 1.00 | 30.64 | A | C |
| ATOM | 233 | NE | ARG | A | 151 | 183.235 | 172.405 | 33.673 | 1.00 | 32.15 | A | N |
| ATOM | 234 | CZ | ARG | A | 151 | 182.900 | 171.151 | 33.348 | 1.00 | 33.18 | A | C |
| ATOM | 235 | NH1 | ARG | A | 151 | 181.644 | 170.851 | 33.004 | 1.00 | 33.09 | A | N |
| ATOM | 236 | NH2 | ARG | A | 151 | 183.831 | 170.190 | 33.362 | 1.00 | 31.48 | A | N |
| ATOM | 237 | C | ARG | A | 151 | 182.516 | 176.707 | 30.518 | 1.00 | 20.61 | A | C |
| ATOM | 238 | O | ARG | A | 151 | 183.158 | 177.560 | 31.163 | 1.00 | 19.62 | A | O |
| ATOM | 239 | N | GLU | A | 152 | 181.315 | 176.939 | 30.006 | 1.00 | 21.84 | A | N |
| ATOM | 240 | CA | GLU | A | 152 | 180.633 | 178.196 | 30.264 | 1.00 | 21.85 | A | C |
| ATOM | 241 | CB | GLU | A | 152 | 179.401 | 178.298 | 29.377 | 1.00 | 26.06 | A | C |
| ATOM | 242 | CG | GLU | A | 152 | 178.766 | 179.690 | 29.289 | 1.00 | 28.31 | A | C |
| ATOM | 243 | CD | GLU | A | 152 | 177.996 | 180.078 | 30.543 | 1.00 | 32.60 | A | C |
| ATOM | 244 | OE1 | GLU | A | 152 | 178.576 | 180.804 | 31.391 | 1.00 | 33.50 | A | O |
| ATOM | 245 | OE2 | GLU | A | 152 | 176.821 | 179.650 | 30.679 | 1.00 | 29.24 | A | O |
| ATOM | 246 | C | GLU | A | 152 | 180.252 | 178.091 | 31.742 | 1.00 | 21.10 | A | C |
| ATOM | 247 | O | GLU | A | 152 | 179.661 | 177.102 | 32.172 | 1.00 | 19.62 | A | O |
| ATOM | 248 | N | LYS | A | 153 | 180.613 | 179.114 | 32.504 | 1.00 | 21.06 | A | N |
| ATOM | 249 | CA | LYS | A | 153 | 180.366 | 179.156 | 33.933 | 1.00 | 20.90 | A | C |
| ATOM | 250 | CB | LYS | A | 153 | 180.996 | 180.417 | 34.513 | 1.00 | 20.37 | A | C |
| ATOM | 251 | CG | LYS | A | 153 | 182.501 | 180.458 | 34.440 | 1.00 | 22.17 | A | C |
| ATOM | 252 | CD | LYS | A | 153 | 183.063 | 181.720 | 35.091 | 1.00 | 21.22 | A | C |
| ATOM | 253 | CE | LYS | A | 153 | 184.568 | 181.658 | 35.002 | 1.00 | 22.77 | A | C |
| ATOM | 254 | NZ | LYS | A | 153 | 185.178 | 182.877 | 35.572 | 1.00 | 24.11 | A | N |
| ATOM | 255 | C | LYS | A | 153 | 178.927 | 179.048 | 34.421 | 1.00 | 21.26 | A | C |
| ATOM | 256 | O | LYS | A | 153 | 178.649 | 178.362 | 35.390 | 1.00 | 25.58 | A | O |
| ATOM | 257 | N | GLN | A | 154 | 177.982 | 179.704 | 33.786 | 1.00 | 23.03 | A | N |
| ATOM | 258 | CA | GLN | A | 154 | 176.639 | 179.579 | 34.330 | 1.00 | 23.96 | A | C |
| ATOM | 259 | CB | GLN | A | 154 | 175.744 | 180.686 | 33.800 | 1.00 | 23.79 | A | C |
| ATOM | 260 | CG | GLN | A | 154 | 176.125 | 182.053 | 34.288 | 1.00 | 24.55 | A | C |
| ATOM | 261 | CD | GLN | A | 154 | 175.243 | 183.133 | 33.709 | 1.00 | 24.55 | A | C |
| ATOM | 262 | OE1 | GLN | A | 154 | 175.674 | 184.283 | 33.617 | 1.00 | 23.87 | A | O |
| ATOM | 263 | NE2 | GLN | A | 154 | 173.998 | 182.779 | 33.309 | 1.00 | 22.50 | A | N |
| ATOM | 264 | C | GLN | A | 154 | 175.951 | 178.229 | 34.086 | 1.00 | 24.10 | A | C |
| ATOM | 265 | O | GLN | A | 154 | 175.345 | 177.675 | 34.996 | 1.00 | 25.34 | A | O |
| ATOM | 266 | N | SER | A | 155 | 176.018 | 177.700 | 32.871 | 1.00 | 22.36 | A | N |
| ATOM | 267 | CA | SER | A | 155 | 175.351 | 176.441 | 32.585 | 1.00 | 21.24 | A | C |
| ATOM | 268 | CB | SER | A | 155 | 174.790 | 176.517 | 31.180 | 1.00 | 20.38 | A | C |
| ATOM | 269 | OG | SER | A | 155 | 175.875 | 176.607 | 30.282 | 1.00 | 22.24 | A | O |
| ATOM | 270 | C | SER | A | 155 | 176.234 | 175.182 | 32.691 | 1.00 | 23.66 | A | C |
| ATOM | 271 | O | SER | A | 155 | 175.725 | 174.048 | 32.677 | 1.00 | 20.04 | A | O |
| ATOM | 272 | N | LYS | A | 156 | 177.549 | 175.406 | 32.789 | 1.00 | 23.61 | A | N |
| ATOM | 273 | CA | LYS | A | 156 | 178.572 | 174.358 | 32.849 | 1.00 | 24.47 | A | C |

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|------|-----|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 274 | CB | LYS | A | 156 | 178.350 | 173.467 | 34.065 | 1.00 | 25.24 | A | C |
| ATOM | 275 | CG | LYS | A | 156 | 178.523 | 174.254 | 35.368 | 1.00 | 32.64 | A | C |
| ATOM | 276 | CD | LYS | A | 156 | 178.309 | 173.358 | 36.552 | 1.00 | 35.73 | A | C |
| ATOM | 277 | CE | LYS | A | 156 | 178.506 | 174.079 | 37.870 | 1.00 | 41.50 | A | C |
| ATOM | 278 | NZ | LYS | A | 156 | 178.457 | 173.059 | 38.978 | 1.00 | 42.75 | A | N |
| ATOM | 279 | C | LYS | A | 156 | 178.634 | 173.543 | 31.548 | 1.00 | 22.03 | A | C |
| ATOM | 280 | O | LYS | A | 156 | 179.131 | 172.417 | 31.509 | 1.00 | 22.31 | A | O |
| ATOM | 281 | N | PHE | A | 157 | 178.152 | 174.152 | 30.472 | 1.00 | 20.94 | A | N |
| ATOM | 282 | CA | PHE | A | 157 | 178.180 | 173.530 | 29.162 | 1.00 | 19.88 | A | C |
| ATOM | 283 | CB | PHE | A | 157 | 177.370 | 174.367 | 28.174 | 1.00 | 21.87 | A | C |
| ATOM | 284 | CG | PHE | A | 157 | 177.209 | 173.735 | 26.840 | 1.00 | 22.62 | A | C |
| ATOM | 285 | CD1 | PHE | A | 157 | 176.501 | 172.546 | 26.704 | 1.00 | 26.84 | A | C |
| ATOM | 286 | CD2 | PHE | A | 157 | 177.745 | 174.336 | 25.707 | 1.00 | 24.18 | A | C |
| ATOM | 287 | CE1 | PHE | A | 157 | 176.326 | 171.957 | 25.448 | 1.00 | 27.13 | A | C |
| ATOM | 288 | CE2 | PHE | A | 157 | 177.576 | 173.763 | 24.446 | 1.00 | 24.84 | A | C |
| ATOM | 289 | CZ | PHE | A | 157 | 176.868 | 172.574 | 24.316 | 1.00 | 26.19 | A | C |
| ATOM | 290 | C | PHE | A | 157 | 179.645 | 173.447 | 28.708 | 1.00 | 20.86 | A | C |
| ATOM | 291 | O | PHE | A | 157 | 180.394 | 174.451 | 28.739 | 1.00 | 16.68 | A | O |
| ATOM | 292 | N | ILE | A | 158 | 180.056 | 172.243 | 28.316 | 1.00 | 18.62 | A | N |
| ATOM | 293 | CA | ILE | A | 158 | 181.412 | 171.997 | 27.862 | 1.00 | 17.65 | A | C |
| ATOM | 294 | CB | ILE | A | 158 | 181.818 | 170.521 | 28.156 | 1.00 | 21.22 | A | C |
| ATOM | 295 | CG2 | ILE | A | 158 | 183.120 | 170.183 | 27.472 | 1.00 | 20.54 | A | C |
| ATOM | 296 | CG1 | ILE | A | 158 | 181.998 | 170.339 | 29.675 | 1.00 | 25.44 | A | C |
| ATOM | 297 | CD1 | ILE | A | 158 | 181.751 | 168.898 | 30.193 | 1.00 | 32.22 | A | C |
| ATOM | 298 | C | ILE | A | 158 | 181.502 | 172.306 | 26.363 | 1.00 | 19.32 | A | C |
| ATOM | 299 | O | ILE | A | 158 | 180.622 | 171.940 | 25.588 | 1.00 | 21.25 | A | O |
| ATOM | 300 | N | LEU | A | 159 | 182.544 | 173.021 | 25.958 | 1.00 | 19.68 | A | N |
| ATOM | 301 | CA | LEU | A | 159 | 182.729 | 173.365 | 24.552 | 1.00 | 18.03 | A | C |
| ATOM | 302 | CB | LEU | A | 159 | 181.915 | 174.625 | 24.214 | 1.00 | 18.70 | A | C |
| ATOM | 303 | CG | LEU | A | 159 | 181.855 | 175.726 | 25.275 | 1.00 | 18.81 | A | C |
| ATOM | 304 | CD1 | LEU | A | 159 | 183.137 | 176.522 | 25.197 | 1.00 | 25.89 | A | C |
| ATOM | 305 | CD2 | LEU | A | 159 | 180.667 | 176.644 | 25.065 | 1.00 | 15.33 | A | C |
| ATOM | 306 | C | LEU | A | 159 | 184.218 | 173.553 | 24.263 | 1.00 | 16.64 | A | C |
| ATOM | 307 | O | LEU | A | 159 | 185.054 | 173.211 | 25.099 | 1.00 | 10.64 | A | O |
| ATOM | 308 | N | ALA | A | 160 | 184.562 | 174.069 | 23.084 | 1.00 | 14.09 | A | N |
| ATOM | 309 | CA | ALA | A | 160 | 185.981 | 174.271 | 22.742 | 1.00 | 14.90 | A | C |
| ATOM | 310 | CB | ALA | A | 160 | 186.371 | 173.394 | 21.574 | 1.00 | 11.94 | A | C |
| ATOM | 311 | C | ALA | A | 160 | 186.230 | 175.736 | 22.420 | 1.00 | 15.35 | A | C |
| ATOM | 312 | O | ALA | A | 160 | 185.419 | 176.377 | 21.777 | 1.00 | 16.22 | A | O |
| ATOM | 313 | N | LEU | A | 161 | 187.348 | 176.277 | 22.876 | 1.00 | 17.51 | A | N |
| ATOM | 314 | CA | LEU | A | 161 | 187.656 | 177.685 | 22.636 | 1.00 | 17.81 | A | C |
| ATOM | 315 | CB | LEU | A | 161 | 187.959 | 178.379 | 23.958 | 1.00 | 19.09 | A | C |
| ATOM | 316 | CG | LEU | A | 161 | 187.661 | 179.882 | 24.003 | 1.00 | 24.28 | A | C |
| ATOM | 317 | CD1 | LEU | A | 161 | 186.190 | 180.085 | 23.715 | 1.00 | 19.74 | A | C |
| ATOM | 318 | CD2 | LEU | A | 161 | 188.020 | 180.482 | 25.396 | 1.00 | 26.64 | A | C |
| ATOM | 319 | C | LEU | A | 161 | 188.857 | 177.829 | 21.697 | 1.00 | 18.94 | A | C |
| ATOM | 320 | O | LEU | A | 161 | 189.984 | 177.506 | 22.070 | 1.00 | 15.15 | A | O |
| ATOM | 321 | N | LYS | A | 162 | 188.605 | 178.302 | 20.477 | 1.00 | 15.44 | A | N |
| ATOM | 322 | CA | LYS | A | 162 | 189.671 | 178.489 | 19.506 | 1.00 | 16.27 | A | C |
| ATOM | 323 | CB | LYS | A | 162 | 189.142 | 178.254 | 18.093 | 1.00 | 15.06 | A | C |
| ATOM | 324 | CG | LYS | A | 162 | 190.184 | 178.338 | 17.036 | 1.00 | 13.12 | A | C |
| ATOM | 325 | CD | LYS | A | 162 | 189.615 | 177.968 | 15.682 | 1.00 | 15.23 | A | C |
| ATOM | 326 | CE | LYS | A | 162 | 190.694 | 178.025 | 14.590 | 1.00 | 15.94 | A | C |
| ATOM | 327 | NZ | LYS | A | 162 | 190.118 | 177.625 | 13.262 | 1.00 | 21.75 | A | N |
| ATOM | 328 | C | LYS | A | 162 | 190.220 | 179.909 | 19.626 | 1.00 | 16.04 | A | C |
| ATOM | 329 | O | LYS | A | 162 | 189.486 | 180.863 | 19.427 | 1.00 | 17.16 | A | O |
| ATOM | 330 | N | VAL | A | 163 | 191.501 | 180.044 | 19.955 | 1.00 | 15.21 | A | N |
| ATOM | 331 | CA | VAL | A | 163 | 192.110 | 181.357 | 20.107 | 1.00 | 16.50 | A | C |
| ATOM | 332 | CB | VAL | A | 163 | 193.047 | 181.400 | 21.336 | 1.00 | 17.79 | A | C |
| ATOM | 333 | CG1 | VAL | A | 163 | 193.563 | 182.816 | 21.546 | 1.00 | 15.20 | A | C |
| ATOM | 334 | CG2 | VAL | A | 163 | 192.316 | 180.897 | 22.578 | 1.00 | 14.92 | A | C |
| ATOM | 335 | C | VAL | A | 163 | 192.938 | 181.758 | 18.888 | 1.00 | 17.82 | A | C |
| ATOM | 336 | O | VAL | A | 163 | 193.616 | 180.933 | 18.287 | 1.00 | 20.09 | A | O |
| ATOM | 337 | N | LEU | A | 164 | 192.888 | 183.028 | 18.522 | 1.00 | 18.13 | A | N |
| ATOM | 338 | CA | LEU | A | 164 | 193.670 | 183.509 | 17.387 | 1.00 | 15.87 | A | C |
| ATOM | 339 | CB | LEU | A | 164 | 192.747 | 183.802 | 16.203 | 1.00 | 18.86 | A | C |
| ATOM | 340 | CG | LEU | A | 164 | 191.903 | 182.603 | 15.752 | 1.00 | 20.75 | A | C |
| ATOM | 341 | CD1 | LEU | A | 164 | 190.429 | 182.980 | 15.575 | 1.00 | 23.26 | A | C |
| ATOM | 342 | CD2 | LEU | A | 164 | 192.481 | 182.084 | 14.477 | 1.00 | 19.09 | A | C |
| ATOM | 343 | C | LEU | A | 164 | 194.352 | 184.789 | 17.835 | 1.00 | 16.04 | A | C |

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|------|-----|-----|-----------|---------|---------|--------|------|-------|---|---|
| ATOM | 344 | O | LEU A 164 | 193.687 | 185.709 | 18.295 | 1.00 | 13.41 | A | O |
| ATOM | 345 | N | PHE A 165 | 195.670 | 184.858 | 17.738 | 1.00 | 15.52 | A | N |
| ATOM | 346 | CA | PHE A 165 | 196.340 | 186.082 | 18.141 | 1.00 | 18.33 | A | C |
| ATOM | 347 | CB | PHE A 165 | 197.804 | 185.823 | 18.497 | 1.00 | 19.71 | A | C |
| ATOM | 348 | CG | PHE A 165 | 197.987 | 185.214 | 19.850 | 1.00 | 26.23 | A | C |
| ATOM | 349 | CD1 | PHE A 165 | 197.826 | 183.840 | 20.033 | 1.00 | 27.06 | A | C |
| ATOM | 350 | CD2 | PHE A 165 | 198.222 | 186.025 | 20.961 | 1.00 | 28.47 | A | C |
| ATOM | 351 | CE1 | PHE A 165 | 197.899 | 183.281 | 21.298 | 1.00 | 32.07 | A | C |
| ATOM | 352 | CE2 | PHE A 165 | 198.299 | 185.479 | 22.239 | 1.00 | 31.56 | A | C |
| ATOM | 353 | CZ | PHE A 165 | 198.133 | 184.104 | 22.411 | 1.00 | 35.02 | A | C |
| ATOM | 354 | C | PHE A 165 | 196.228 | 187.062 | 16.989 | 1.00 | 19.49 | A | C |
| ATOM | 355 | O | PHE A 165 | 196.610 | 186.742 | 15.857 | 1.00 | 21.60 | A | O |
| ATOM | 356 | N | LYS A 166 | 195.674 | 188.242 | 17.277 | 1.00 | 18.17 | A | N |
| ATOM | 357 | CA | LYS A 166 | 195.458 | 189.299 | 16.282 | 1.00 | 17.63 | A | C |
| ATOM | 358 | CB | LYS A 166 | 194.786 | 190.520 | 16.931 | 1.00 | 16.68 | A | C |
| ATOM | 359 | CG | LYS A 166 | 193.319 | 190.346 | 17.376 | 1.00 | 15.54 | A | C |
| ATOM | 360 | CD | LYS A 166 | 192.703 | 191.672 | 17.826 | 1.00 | 10.39 | A | C |
| ATOM | 361 | CE | LYS A 166 | 191.259 | 191.452 | 18.272 | 1.00 | 12.43 | A | C |
| ATOM | 362 | NZ | LYS A 166 | 190.505 | 192.644 | 18.792 | 1.00 | 7.46 | A | N |
| ATOM | 363 | C | LYS A 166 | 196.696 | 189.792 | 15.536 | 1.00 | 19.44 | A | C |
| ATOM | 364 | O | LYS A 166 | 196.615 | 190.103 | 14.343 | 1.00 | 19.53 | A | O |
| ATOM | 365 | N | ALA A 167 | 197.828 | 189.885 | 16.237 | 1.00 | 19.10 | A | N |
| ATOM | 366 | CA | ALA A 167 | 199.068 | 190.369 | 15.628 | 1.00 | 18.82 | A | C |
| ATOM | 367 | CB | ALA A 167 | 200.140 | 190.591 | 16.710 | 1.00 | 11.48 | A | C |
| ATOM | 368 | C | ALA A 167 | 199.551 | 189.377 | 14.571 | 1.00 | 18.71 | A | C |
| ATOM | 369 | O | ALA A 167 | 200.085 | 189.762 | 13.534 | 1.00 | 19.61 | A | O |
| ATOM | 370 | N | GLN A 168 | 199.351 | 188.092 | 14.840 | 1.00 | 18.71 | A | N |
| ATOM | 371 | CA | GLN A 168 | 199.734 | 187.039 | 13.907 | 1.00 | 18.86 | A | C |
| ATOM | 372 | CB | GLN A 168 | 199.584 | 185.666 | 14.561 | 1.00 | 21.65 | A | C |
| ATOM | 373 | CG | GLN A 168 | 200.584 | 184.664 | 14.014 | 1.00 | 25.64 | A | C |
| ATOM | 374 | CD | GLN A 168 | 200.544 | 183.310 | 14.690 | 1.00 | 29.19 | A | C |
| ATOM | 375 | OE1 | GLN A 168 | 200.269 | 183.208 | 15.900 | 1.00 | 27.17 | A | O |
| ATOM | 376 | NE2 | GLN A 168 | 200.846 | 182.249 | 13.920 | 1.00 | 28.74 | A | N |
| ATOM | 377 | C | GLN A 168 | 198.824 | 187.137 | 12.688 | 1.00 | 17.82 | A | C |
| ATOM | 378 | O | GLN A 168 | 199.273 | 187.079 | 11.560 | 1.00 | 20.56 | A | O |
| ATOM | 379 | N | LEU A 169 | 197.530 | 187.289 | 12.931 | 1.00 | 19.46 | A | N |
| ATOM | 380 | CA | LEU A 169 | 196.553 | 187.404 | 11.848 | 1.00 | 19.86 | A | C |
| ATOM | 381 | CB | LEU A 169 | 195.146 | 187.572 | 12.393 | 1.00 | 20.65 | A | C |
| ATOM | 382 | CG | LEU A 169 | 194.514 | 186.370 | 13.052 | 1.00 | 24.58 | A | C |
| ATOM | 383 | CD1 | LEU A 169 | 193.168 | 186.837 | 13.566 | 1.00 | 23.53 | A | C |
| ATOM | 384 | CD2 | LEU A 169 | 194.396 | 185.189 | 12.069 | 1.00 | 20.67 | A | C |
| ATOM | 385 | C | LEU A 169 | 196.802 | 188.604 | 10.961 | 1.00 | 21.12 | A | C |
| ATOM | 386 | O | LEU A 169 | 196.533 | 188.564 | 9.761 | 1.00 | 17.39 | A | O |
| ATOM | 387 | N | GLU A 170 | 197.261 | 189.697 | 11.564 | 1.00 | 22.51 | A | N |
| ATOM | 388 | CA | GLU A 170 | 197.520 | 190.915 | 10.807 | 1.00 | 23.02 | A | C |
| ATOM | 389 | CB | GLU A 170 | 197.637 | 192.102 | 11.769 | 1.00 | 22.68 | A | C |
| ATOM | 390 | CG | GLU A 170 | 196.267 | 192.607 | 12.232 | 1.00 | 27.99 | A | C |
| ATOM | 391 | CD | GLU A 170 | 196.294 | 193.330 | 13.579 | 1.00 | 31.84 | A | C |
| ATOM | 392 | OE1 | GLU A 170 | 197.334 | 193.955 | 13.920 | 1.00 | 33.33 | A | O |
| ATOM | 393 | OE2 | GLU A 170 | 195.256 | 193.278 | 14.285 | 1.00 | 31.22 | A | O |
| ATOM | 394 | C | GLU A 170 | 198.762 | 190.753 | 9.949 | 1.00 | 21.03 | A | C |
| ATOM | 395 | O | GLU A 170 | 198.739 | 191.068 | 8.757 | 1.00 | 23.09 | A | O |
| ATOM | 396 | N | LYS A 171 | 199.826 | 190.220 | 10.535 | 1.00 | 17.25 | A | N |
| ATOM | 397 | CA | LYS A 171 | 201.059 | 190.014 | 9.790 | 1.00 | 19.63 | A | C |
| ATOM | 398 | CB | LYS A 171 | 202.139 | 189.442 | 10.706 | 1.00 | 21.18 | A | C |
| ATOM | 399 | CG | LYS A 171 | 203.525 | 189.395 | 10.073 | 1.00 | 25.15 | A | C |
| ATOM | 400 | CD | LYS A 171 | 204.574 | 188.888 | 11.054 | 1.00 | 28.24 | A | C |
| ATOM | 401 | CE | LYS A 171 | 205.952 | 188.807 | 10.395 | 1.00 | 32.60 | A | C |
| ATOM | 402 | NZ | LYS A 171 | 207.003 | 188.297 | 11.331 | 1.00 | 33.23 | A | N |
| ATOM | 403 | C | LYS A 171 | 200.838 | 189.074 | 8.609 | 1.00 | 19.42 | A | C |
| ATOM | 404 | O | LYS A 171 | 201.451 | 189.235 | 7.551 | 1.00 | 21.92 | A | O |
| ATOM | 405 | N | ALA A 172 | 199.957 | 188.095 | 8.782 | 1.00 | 17.92 | A | N |
| ATOM | 406 | CA | ALA A 172 | 199.666 | 187.126 | 7.720 | 1.00 | 18.61 | A | C |
| ATOM | 407 | CB | ALA A 172 | 199.168 | 185.826 | 8.341 | 1.00 | 13.39 | A | C |
| ATOM | 408 | C | ALA A 172 | 198.666 | 187.627 | 6.679 | 1.00 | 16.48 | A | C |
| ATOM | 409 | O | ALA A 172 | 198.600 | 187.082 | 5.577 | 1.00 | 18.45 | A | O |
| ATOM | 410 | N | GLY A 173 | 197.890 | 188.651 | 7.053 | 1.00 | 16.48 | A | N |
| ATOM | 411 | CA | GLY A 173 | 196.876 | 189.241 | 6.178 | 1.00 | 17.37 | A | C |
| ATOM | 412 | C | GLY A 173 | 195.719 | 188.297 | 5.904 | 1.00 | 18.48 | A | C |
| ATOM | 413 | O | GLY A 173 | 195.158 | 188.264 | 4.789 | 1.00 | 17.50 | A | O |

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|------|-----|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 414 | N | VAL | A | 174 | 195.344 | 187.536 | 6.921 | 1.00 | 16.39 | A | N |
| ATOM | 415 | CA | VAL | A | 174 | 194.274 | 186.573 | 6.770 | 1.00 | 18.80 | A | C |
| ATOM | 416 | CB | VAL | A | 174 | 194.778 | 185.171 | 7.226 | 1.00 | 17.75 | A | C |
| ATOM | 417 | CG1 | VAL | A | 174 | 195.976 | 184.770 | 6.371 | 1.00 | 17.03 | A | C |
| ATOM | 418 | CG2 | VAL | A | 174 | 195.166 | 185.207 | 8.684 | 1.00 | 12.69 | A | C |
| ATOM | 419 | C | VAL | A | 174 | 193.015 | 186.982 | 7.535 | 1.00 | 19.69 | A | C |
| ATOM | 420 | O | VAL | A | 174 | 192.152 | 186.152 | 7.828 | 1.00 | 22.14 | A | O |
| ATOM | 421 | N | GLU | A | 175 | 192.900 | 188.282 | 7.801 | 1.00 | 24.29 | A | N |
| ATOM | 422 | CA | GLU | A | 175 | 191.751 | 188.834 | 8.521 | 1.00 | 25.76 | A | C |
| ATOM | 423 | CB | GLU | A | 175 | 191.902 | 190.351 | 8.799 | 1.00 | 29.22 | A | C |
| ATOM | 424 | CG | GLU | A | 175 | 193.333 | 190.938 | 8.903 | 1.00 | 38.41 | A | C |
| ATOM | 425 | CD | GLU | A | 175 | 193.998 | 191.112 | 7.548 | 1.00 | 39.97 | A | C |
| ATOM | 426 | OE1 | GLU | A | 175 | 193.310 | 190.986 | 6.511 | 1.00 | 47.49 | A | O |
| ATOM | 427 | OE2 | GLU | A | 175 | 195.206 | 191.382 | 7.507 | 1.00 | 46.22 | A | O |
| ATOM | 428 | C | GLU | A | 175 | 190.452 | 188.611 | 7.752 | 1.00 | 25.95 | A | C |
| ATOM | 429 | O | GLU | A | 175 | 189.423 | 188.313 | 8.337 | 1.00 | 25.42 | A | O |
| ATOM | 430 | N | HIS | A | 176 | 190.483 | 188.768 | 6.438 | 1.00 | 26.45 | A | N |
| ATOM | 431 | CA | HIS | A | 176 | 189.254 | 188.539 | 5.708 | 1.00 | 24.68 | A | C |
| ATOM | 432 | CB | HIS | A | 176 | 189.316 | 189.074 | 4.278 | 1.00 | 23.09 | A | C |
| ATOM | 433 | CG | HIS | A | 176 | 187.983 | 189.014 | 3.596 | 1.00 | 32.41 | A | C |
| ATOM | 434 | CD2 | HIS | A | 176 | 187.570 | 188.363 | 2.477 | 1.00 | 34.18 | A | C |
| ATOM | 435 | ND1 | HIS | A | 176 | 186.845 | 189.576 | 4.148 | 1.00 | 32.75 | A | N |
| ATOM | 436 | CE1 | HIS | A | 176 | 185.796 | 189.266 | 3.406 | 1.00 | 33.74 | A | C |
| ATOM | 437 | NE2 | HIS | A | 176 | 186.207 | 188.529 | 2.386 | 1.00 | 34.72 | A | N |
| ATOM | 438 | C | HIS | A | 176 | 188.848 | 187.062 | 5.703 | 1.00 | 23.32 | A | C |
| ATOM | 439 | O | HIS | A | 176 | 187.661 | 186.755 | 5.693 | 1.00 | 22.64 | A | O |
| ATOM | 440 | N | GLN | A | 177 | 189.803 | 186.137 | 5.744 | 1.00 | 21.78 | A | N |
| ATOM | 441 | CA | GLN | A | 177 | 189.432 | 184.721 | 5.774 | 1.00 | 19.85 | A | C |
| ATOM | 442 | CB | GLN | A | 177 | 190.628 | 183.818 | 5.421 | 1.00 | 21.23 | A | C |
| ATOM | 443 | CG | GLN | A | 177 | 191.173 | 183.994 | 3.977 | 1.00 | 23.08 | A | C |
| ATOM | 444 | CD | GLN | A | 177 | 192.113 | 185.179 | 3.856 | 1.00 | 26.14 | A | C |
| ATOM | 445 | OE1 | GLN | A | 177 | 191.901 | 186.204 | 4.512 | 1.00 | 27.02 | A | O |
| ATOM | 446 | NE2 | GLN | A | 177 | 193.161 | 185.056 | 3.012 | 1.00 | 25.09 | A | N |
| ATOM | 447 | C | GLN | A | 177 | 188.859 | 184.317 | 7.129 | 1.00 | 18.66 | A | C |
| ATOM | 448 | O | GLN | A | 177 | 188.057 | 183.390 | 7.195 | 1.00 | 18.16 | A | O |
| ATOM | 449 | N | LEU | A | 178 | 189.267 | 185.001 | 8.202 | 1.00 | 17.80 | A | N |
| ATOM | 450 | CA | LEU | A | 178 | 188.742 | 184.695 | 9.532 | 1.00 | 17.25 | A | C |
| ATOM | 451 | CB | LEU | A | 178 | 189.473 | 185.495 | 10.616 | 1.00 | 14.48 | A | C |
| ATOM | 452 | CG | LEU | A | 178 | 188.948 | 185.297 | 12.041 | 1.00 | 14.78 | A | C |
| ATOM | 453 | CD1 | LEU | A | 178 | 188.822 | 183.792 | 12.391 | 1.00 | 13.65 | A | C |
| ATOM | 454 | CD2 | LEU | A | 178 | 189.904 | 185.964 | 13.002 | 1.00 | 15.52 | A | C |
| ATOM | 455 | C | LEU | A | 178 | 187.257 | 185.050 | 9.569 | 1.00 | 18.82 | A | C |
| ATOM | 456 | O | LEU | A | 178 | 186.436 | 184.346 | 10.148 | 1.00 | 18.56 | A | O |
| ATOM | 457 | N | ARG | A | 179 | 186.929 | 186.171 | 8.950 | 1.00 | 17.14 | A | N |
| ATOM | 458 | CA | ARG | A | 179 | 185.570 | 186.637 | 8.893 | 1.00 | 20.36 | A | C |
| ATOM | 459 | CB | ARG | A | 179 | 185.547 | 188.004 | 8.238 | 1.00 | 24.60 | A | C |
| ATOM | 460 | CG | ARG | A | 179 | 184.191 | 188.581 | 8.190 | 1.00 | 30.51 | A | C |
| ATOM | 461 | CD | ARG | A | 179 | 184.079 | 189.355 | 6.937 | 1.00 | 34.92 | A | C |
| ATOM | 462 | NE | ARG | A | 179 | 183.602 | 190.700 | 7.192 | 1.00 | 44.42 | A | N |
| ATOM | 463 | CZ | ARG | A | 179 | 184.338 | 191.679 | 7.721 | 1.00 | 50.64 | A | C |
| ATOM | 464 | NH1 | ARG | A | 179 | 185.609 | 191.475 | 8.060 | 1.00 | 53.62 | A | N |
| ATOM | 465 | NH2 | ARG | A | 179 | 183.800 | 192.881 | 7.910 | 1.00 | 54.27 | A | N |
| ATOM | 466 | C | ARG | A | 179 | 184.677 | 185.663 | 8.112 | 1.00 | 20.68 | A | C |
| ATOM | 467 | O | ARG | A | 179 | 183.516 | 185.428 | 8.490 | 1.00 | 20.49 | A | O |
| ATOM | 468 | N | ARG | A | 180 | 185.211 | 185.102 | 7.027 | 1.00 | 16.87 | A | N |
| ATOM | 469 | CA | ARG | A | 180 | 184.457 | 184.139 | 6.240 | 1.00 | 16.27 | A | C |
| ATOM | 470 | CB | ARG | A | 180 | 185.145 | 183.851 | 4.880 | 1.00 | 15.64 | A | C |
| ATOM | 471 | CG | ARG | A | 180 | 185.036 | 184.997 | 3.869 | 1.00 | 19.03 | A | C |
| ATOM | 472 | CD | ARG | A | 180 | 185.243 | 184.593 | 2.394 | 1.00 | 19.17 | A | C |
| ATOM | 473 | NE | ARG | A | 180 | 186.536 | 183.973 | 2.158 | 1.00 | 22.25 | A | N |
| ATOM | 474 | CZ | ARG | A | 180 | 187.223 | 184.003 | 1.011 | 1.00 | 22.42 | A | C |
| ATOM | 475 | NH1 | ARG | A | 180 | 186.778 | 184.633 | -0.067 | 1.00 | 16.67 | A | N |
| ATOM | 476 | NH2 | ARG | A | 180 | 188.390 | 183.384 | 0.949 | 1.00 | 23.03 | A | N |
| ATOM | 477 | C | ARG | A | 180 | 184.277 | 182.837 | 7.037 | 1.00 | 16.14 | A | C |
| ATOM | 478 | O | ARG | A | 180 | 183.225 | 182.207 | 6.950 | 1.00 | 17.78 | A | O |
| ATOM | 479 | N | GLU | A | 181 | 185.294 | 182.439 | 7.812 | 1.00 | 15.13 | A | N |
| ATOM | 480 | CA | GLU | A | 181 | 185.211 | 181.222 | 8.627 | 1.00 | 15.82 | A | C |
| ATOM | 481 | CB | GLU | A | 181 | 186.512 | 180.969 | 9.431 | 1.00 | 17.60 | A | C |
| ATOM | 482 | CG | GLU | A | 181 | 186.517 | 179.610 | 10.164 | 1.00 | 22.11 | A | C |
| ATOM | 483 | CD | GLU | A | 181 | 187.779 | 179.293 | 11.023 | 1.00 | 29.50 | A | C |

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|------|-----|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 484 | OE1 | GLU | A | 181 | 188.877 | 179.898 | 10.811 | 1.00 | 23.91 | A | O |
| ATOM | 485 | OE2 | GLU | A | 181 | 187.654 | 178.393 | 11.914 | 1.00 | 30.52 | A | O |
| ATOM | 486 | C | GLU | A | 181 | 184.059 | 181.374 | 9.615 | 1.00 | 17.24 | A | C |
| ATOM | 487 | O | GLU | A | 181 | 183.169 | 180.514 | 9.711 | 1.00 | 17.81 | A | O |
| ATOM | 488 | N | VAL | A | 182 | 184.075 | 182.486 | 10.336 | 1.00 | 13.24 | A | N |
| ATOM | 489 | CA | VAL | A | 182 | 183.056 | 182.746 | 11.323 | 1.00 | 16.10 | A | C |
| ATOM | 490 | CB | VAL | A | 182 | 183.417 | 183.989 | 12.155 | 1.00 | 17.20 | A | C |
| ATOM | 491 | CG1 | VAL | A | 182 | 182.271 | 184.362 | 13.059 | 1.00 | 11.33 | A | C |
| ATOM | 492 | CG2 | VAL | A | 182 | 184.675 | 183.709 | 12.948 | 1.00 | 15.06 | A | C |
| ATOM | 493 | C | VAL | A | 182 | 181.650 | 182.907 | 10.756 | 1.00 | 16.14 | A | C |
| ATOM | 494 | O | VAL | A | 182 | 180.718 | 182.216 | 11.186 | 1.00 | 14.19 | A | O |
| ATOM | 495 | N | GLU | A | 183 | 181.491 | 183.805 | 9.788 | 1.00 | 16.25 | A | N |
| ATOM | 496 | CA | GLU | A | 183 | 180.162 | 184.021 | 9.212 | 1.00 | 17.30 | A | C |
| ATOM | 497 | CB | GLU | A | 183 | 180.190 | 185.187 | 8.214 | 1.00 | 16.51 | A | C |
| ATOM | 498 | CG | GLU | A | 183 | 180.630 | 186.499 | 8.842 | 1.00 | 21.63 | A | C |
| ATOM | 499 | CD | GLU | A | 183 | 180.566 | 187.674 | 7.874 | 1.00 | 24.47 | A | C |
| ATOM | 500 | OE1 | GLU | A | 183 | 180.841 | 187.477 | 6.673 | 1.00 | 27.21 | A | O |
| ATOM | 501 | OE2 | GLU | A | 183 | 180.255 | 188.801 | 8.315 | 1.00 | 29.43 | A | O |
| ATOM | 502 | C | GLU | A | 183 | 179.581 | 182.764 | 8.555 | 1.00 | 14.99 | A | C |
| ATOM | 503 | O | GLU | A | 183 | 178.405 | 182.460 | 8.753 | 1.00 | 16.33 | A | O |
| ATOM | 504 | N | ILE | A | 184 | 180.396 | 182.019 | 7.810 | 1.00 | 12.00 | A | N |
| ATOM | 505 | CA | ILE | A | 184 | 179.908 | 180.808 | 7.159 | 1.00 | 10.45 | A | C |
| ATOM | 506 | CB | ILE | A | 184 | 180.904 | 180.302 | 6.094 | 1.00 | 9.02 | A | C |
| ATOM | 507 | CG2 | ILE | A | 184 | 180.595 | 178.854 | 5.712 | 1.00 | 2.93 | A | C |
| ATOM | 508 | CG1 | ILE | A | 184 | 180.862 | 181.248 | 4.893 | 1.00 | 4.36 | A | C |
| ATOM | 509 | CD1 | ILE | A | 184 | 182.025 | 181.076 | 3.939 | 1.00 | 5.66 | A | C |
| ATOM | 510 | C | ILE | A | 184 | 179.633 | 179.675 | 8.149 | 1.00 | 12.74 | A | C |
| ATOM | 511 | O | ILE | A | 184 | 178.552 | 179.077 | 8.135 | 1.00 | 13.03 | A | O |
| ATOM | 512 | N | GLN | A | 185 | 180.585 | 179.380 | 9.026 | 1.00 | 14.41 | A | N |
| ATOM | 513 | CA | GLN | A | 185 | 180.365 | 178.279 | 9.960 | 1.00 | 15.94 | A | C |
| ATOM | 514 | CB | GLN | A | 185 | 181.663 | 177.933 | 10.682 | 1.00 | 15.68 | A | C |
| ATOM | 515 | CG | GLN | A | 185 | 181.684 | 176.556 | 11.281 | 1.00 | 15.22 | A | C |
| ATOM | 516 | CD | GLN | A | 185 | 182.955 | 176.333 | 12.074 | 1.00 | 16.62 | A | C |
| ATOM | 517 | OE1 | GLN | A | 185 | 183.844 | 177.184 | 12.072 | 1.00 | 19.84 | A | O |
| ATOM | 518 | NE2 | GLN | A | 185 | 183.048 | 175.198 | 12.760 | 1.00 | 15.50 | A | N |
| ATOM | 519 | C | GLN | A | 185 | 179.257 | 178.551 | 10.977 | 1.00 | 14.85 | A | C |
| ATOM | 520 | O | GLN | A | 185 | 178.507 | 177.637 | 11.339 | 1.00 | 11.63 | A | O |
| ATOM | 521 | N | SER | A | 186 | 179.134 | 179.798 | 11.424 | 1.00 | 14.21 | A | N |
| ATOM | 522 | CA | SER | A | 186 | 178.102 | 180.102 | 12.421 | 1.00 | 15.30 | A | C |
| ATOM | 523 | CB | SER | A | 186 | 178.265 | 181.527 | 13.028 | 1.00 | 15.24 | A | C |
| ATOM | 524 | OG | SER | A | 186 | 178.146 | 182.584 | 12.086 | 1.00 | 16.11 | A | O |
| ATOM | 525 | C | SER | A | 186 | 176.686 | 179.916 | 11.898 | 1.00 | 15.48 | A | C |
| ATOM | 526 | O | SER | A | 186 | 175.787 | 179.612 | 12.672 | 1.00 | 20.12 | A | O |
| ATOM | 527 | N | HIS | A | 187 | 176.483 | 180.048 | 10.592 | 1.00 | 15.79 | A | N |
| ATOM | 528 | CA | HIS | A | 187 | 175.153 | 179.908 | 10.018 | 1.00 | 15.76 | A | C |
| ATOM | 529 | CB | HIS | A | 187 | 174.964 | 180.942 | 8.914 | 1.00 | 14.22 | A | C |
| ATOM | 530 | CG | HIS | A | 187 | 174.857 | 182.348 | 9.414 | 1.00 | 14.55 | A | C |
| ATOM | 531 | CD2 | HIS | A | 187 | 173.787 | 183.070 | 9.816 | 1.00 | 12.55 | A | C |
| ATOM | 532 | ND1 | HIS | A | 187 | 175.944 | 183.189 | 9.516 | 1.00 | 13.11 | A | N |
| ATOM | 533 | CE1 | HIS | A | 187 | 175.548 | 184.369 | 9.951 | 1.00 | 10.14 | A | C |
| ATOM | 534 | NE2 | HIS | A | 187 | 174.243 | 184.324 | 10.140 | 1.00 | 15.06 | A | N |
| ATOM | 535 | C | HIS | A | 187 | 174.838 | 178.515 | 9.469 | 1.00 | 17.67 | A | C |
| ATOM | 536 | O | HIS | A | 187 | 173.762 | 178.272 | 8.931 | 1.00 | 17.40 | A | O |
| ATOM | 537 | N | LEU | A | 188 | 175.777 | 177.595 | 9.616 | 1.00 | 18.89 | A | N |
| ATOM | 538 | CA | LEU | A | 188 | 175.608 | 176.243 | 9.118 | 1.00 | 16.21 | A | C |
| ATOM | 539 | CB | LEU | A | 188 | 176.972 | 175.721 | 8.652 | 1.00 | 15.40 | A | C |
| ATOM | 540 | CG | LEU | A | 188 | 177.339 | 175.433 | 7.185 | 1.00 | 14.79 | A | C |
| ATOM | 541 | CD1 | LEU | A | 188 | 176.514 | 176.200 | 6.155 | 1.00 | 14.64 | A | C |
| ATOM | 542 | CD2 | LEU | A | 188 | 178.805 | 175.738 | 7.024 | 1.00 | 11.29 | A | C |
| ATOM | 543 | C | LEU | A | 188 | 175.047 | 175.408 | 10.266 | 1.00 | 17.59 | A | C |
| ATOM | 544 | O | LEU | A | 188 | 175.382 | 175.630 | 11.423 | 1.00 | 19.21 | A | O |
| ATOM | 545 | N | ARG | A | 189 | 174.174 | 174.458 | 9.955 | 1.00 | 19.36 | A | N |
| ATOM | 546 | CA | ARG | A | 189 | 173.579 | 173.603 | 10.988 | 1.00 | 21.36 | A | C |
| ATOM | 547 | CB | ARG | A | 189 | 172.190 | 174.086 | 11.398 | 1.00 | 22.58 | A | C |
| ATOM | 548 | CG | ARG | A | 189 | 172.131 | 175.420 | 12.110 | 1.00 | 32.57 | A | C |
| ATOM | 549 | CD | ARG | A | 189 | 172.277 | 175.274 | 13.621 | 1.00 | 34.83 | A | C |
| ATOM | 550 | NE | ARG | A | 189 | 172.168 | 176.568 | 14.298 | 1.00 | 40.56 | A | N |
| ATOM | 551 | CZ | ARG | A | 189 | 172.993 | 177.598 | 14.091 | 1.00 | 43.35 | A | C |
| ATOM | 552 | NH1 | ARG | A | 189 | 173.993 | 177.481 | 13.215 | 1.00 | 42.31 | A | N |
| ATOM | 553 | NH2 | ARG | A | 189 | 172.827 | 178.740 | 14.770 | 1.00 | 42.32 | A | N |

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|------|-----|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 554 | C | ARG | A | 189 | 173.423 | 172.219 | 10.415 | 1.00 | 19.45 | A | C |
| ATOM | 555 | O | ARG | A | 189 | 172.582 | 171.996 | 9.558 | 1.00 | 19.37 | A | O |
| ATOM | 556 | N | HIS | A | 190 | 174.218 | 171.283 | 10.900 | 1.00 | 16.48 | A | N |
| ATOM | 557 | CA | HIS | A | 190 | 174.148 | 169.936 | 10.388 | 1.00 | 16.32 | A | C |
| ATOM | 558 | CB | HIS | A | 190 | 174.865 | 169.868 | 9.042 | 1.00 | 13.06 | A | C |
| ATOM | 559 | CG | HIS | A | 190 | 174.848 | 168.517 | 8.403 | 1.00 | 8.96 | A | C |
| ATOM | 560 | CD2 | HIS | A | 190 | 175.640 | 167.430 | 8.584 | 1.00 | 9.19 | A | C |
| ATOM | 561 | ND1 | HIS | A | 190 | 173.942 | 168.169 | 7.422 | 1.00 | 9.60 | A | N |
| ATOM | 562 | CE1 | HIS | A | 190 | 174.177 | 166.929 | 7.026 | 1.00 | 8.25 | A | C |
| ATOM | 563 | NE2 | HIS | A | 190 | 175.202 | 166.456 | 7.717 | 1.00 | 10.48 | A | N |
| ATOM | 564 | C | HIS | A | 190 | 174.857 | 169.069 | 11.409 | 1.00 | 18.77 | A | C |
| ATOM | 565 | O | HIS | A | 190 | 175.747 | 169.538 | 12.110 | 1.00 | 19.58 | A | O |
| ATOM | 566 | N | PRO | A | 191 | 174.437 | 167.797 | 11.526 | 1.00 | 19.81 | A | N |
| ATOM | 567 | CD | PRO | A | 191 | 173.236 | 167.329 | 10.808 | 1.00 | 18.67 | A | C |
| ATOM | 568 | CA | PRO | A | 191 | 174.946 | 166.749 | 12.430 | 1.00 | 18.82 | A | C |
| ATOM | 569 | CB | PRO | A | 191 | 174.058 | 165.545 | 12.108 | 1.00 | 15.98 | A | C |
| ATOM | 570 | CG | PRO | A | 191 | 172.813 | 166.147 | 11.615 | 1.00 | 19.49 | A | C |
| ATOM | 571 | C | PRO | A | 191 | 176.422 | 166.383 | 12.239 | 1.00 | 15.63 | A | C |
| ATOM | 572 | O | PRO | A | 191 | 177.074 | 165.908 | 13.167 | 1.00 | 16.18 | A | O |
| ATOM | 573 | N | ASN | A | 192 | 176.930 | 166.564 | 11.029 | 1.00 | 13.38 | A | N |
| ATOM | 574 | CA | ASN | A | 192 | 178.306 | 166.216 | 10.740 | 1.00 | 13.06 | A | C |
| ATOM | 575 | CB | ASN | A | 192 | 178.367 | 165.242 | 9.568 | 1.00 | 16.94 | A | C |
| ATOM | 576 | CG | ASN | A | 192 | 177.621 | 163.963 | 9.853 | 1.00 | 21.40 | A | C |
| ATOM | 577 | OD1 | ASN | A | 192 | 176.478 | 163.790 | 9.431 | 1.00 | 24.81 | A | O |
| ATOM | 578 | ND2 | ASN | A | 192 | 178.255 | 163.062 | 10.596 | 1.00 | 19.25 | A | N |
| ATOM | 579 | C | ASN | A | 192 | 179.189 | 167.407 | 10.467 | 1.00 | 13.65 | A | C |
| ATOM | 580 | O | ASN | A | 192 | 180.258 | 167.276 | 9.869 | 1.00 | 15.58 | A | O |
| ATOM | 581 | N | ILE | A | 193 | 178.725 | 168.584 | 10.865 | 1.00 | 13.34 | A | N |
| ATOM | 582 | CA | ILE | A | 193 | 179.529 | 169.789 | 10.734 | 1.00 | 12.06 | A | C |
| ATOM | 583 | CB | ILE | A | 193 | 178.886 | 170.843 | 9.814 | 1.00 | 11.35 | A | C |
| ATOM | 584 | CG2 | ILE | A | 193 | 179.688 | 172.131 | 9.882 | 1.00 | 5.81 | A | C |
| ATOM | 585 | CG1 | ILE | A | 193 | 178.807 | 170.317 | 8.381 | 1.00 | 6.17 | A | C |
| ATOM | 586 | CD1 | ILE | A | 193 | 178.045 | 171.205 | 7.453 | 1.00 | 8.69 | A | C |
| ATOM | 587 | C | ILE | A | 193 | 179.651 | 170.377 | 12.134 | 1.00 | 12.85 | A | C |
| ATOM | 588 | O | ILE | A | 193 | 178.663 | 170.540 | 12.840 | 1.00 | 14.90 | A | O |
| ATOM | 589 | N | LEU | A | 194 | 180.874 | 170.678 | 12.530 | 1.00 | 13.66 | A | N |
| ATOM | 590 | CA | LEU | A | 194 | 181.123 | 171.253 | 13.839 | 1.00 | 14.76 | A | C |
| ATOM | 591 | CB | LEU | A | 194 | 182.623 | 171.519 | 14.036 | 1.00 | 16.68 | A | C |
| ATOM | 592 | CG | LEU | A | 194 | 183.117 | 171.537 | 15.486 | 1.00 | 15.84 | A | C |
| ATOM | 593 | CD1 | LEU | A | 194 | 183.039 | 170.099 | 16.000 | 1.00 | 14.02 | A | C |
| ATOM | 594 | CD2 | LEU | A | 194 | 184.545 | 172.073 | 15.588 | 1.00 | 14.49 | A | C |
| ATOM | 595 | C | LEU | A | 194 | 180.381 | 172.578 | 13.964 | 1.00 | 16.81 | A | C |
| ATOM | 596 | O | LEU | A | 194 | 180.450 | 173.433 | 13.070 | 1.00 | 18.34 | A | O |
| ATOM | 597 | N | ARG | A | 195 | 179.683 | 172.727 | 15.085 | 1.00 | 15.08 | A | N |
| ATOM | 598 | CA | ARG | A | 195 | 178.924 | 173.924 | 15.390 | 1.00 | 16.45 | A | C |
| ATOM | 599 | CB | ARG | A | 195 | 177.878 | 173.634 | 16.474 | 1.00 | 19.44 | A | C |
| ATOM | 600 | CG | ARG | A | 195 | 176.596 | 172.975 | 15.987 | 1.00 | 25.93 | A | C |
| ATOM | 601 | CD | ARG | A | 195 | 175.746 | 173.967 | 15.232 | 1.00 | 29.82 | A | C |
| ATOM | 602 | NE | ARG | A | 195 | 174.811 | 174.694 | 16.091 | 1.00 | 36.41 | A | N |
| ATOM | 603 | CZ | ARG | A | 195 | 174.859 | 176.008 | 16.302 | 1.00 | 39.91 | A | C |
| ATOM | 604 | NH1 | ARG | A | 195 | 175.804 | 176.729 | 15.718 | 1.00 | 44.61 | A | N |
| ATOM | 605 | NH2 | ARG | A | 195 | 173.958 | 176.608 | 17.075 | 1.00 | 40.14 | A | N |
| ATOM | 606 | C | ARG | A | 195 | 179.787 | 175.113 | 15.870 | 1.00 | 16.17 | A | C |
| ATOM | 607 | O | ARG | A | 195 | 180.714 | 174.950 | 16.656 | 1.00 | 13.03 | A | O |
| ATOM | 608 | N | LEU | A | 196 | 179.471 | 176.293 | 15.341 | 1.00 | 17.85 | A | N |
| ATOM | 609 | CA | LEU | A | 196 | 180.114 | 177.536 | 15.749 | 1.00 | 16.50 | A | C |
| ATOM | 610 | CB | LEU | A | 196 | 180.623 | 178.380 | 14.572 | 1.00 | 13.17 | A | C |
| ATOM | 611 | CG | LEU | A | 196 | 181.348 | 179.669 | 14.959 | 1.00 | 15.31 | A | C |
| ATOM | 612 | CD1 | LEU | A | 196 | 182.467 | 179.277 | 15.910 | 1.00 | 13.98 | A | C |
| ATOM | 613 | CD2 | LEU | A | 196 | 181.922 | 180.404 | 13.749 | 1.00 | 12.29 | A | C |
| ATOM | 614 | C | LEU | A | 196 | 178.975 | 178.281 | 16.466 | 1.00 | 15.90 | A | C |
| ATOM | 615 | O | LEU | A | 196 | 178.037 | 178.767 | 15.839 | 1.00 | 15.06 | A | O |
| ATOM | 616 | N | TYR | A | 197 | 179.062 | 178.337 | 17.791 | 1.00 | 18.19 | A | N |
| ATOM | 617 | CA | TYR | A | 197 | 178.049 | 178.974 | 18.610 | 1.00 | 18.38 | A | C |
| ATOM | 618 | CB | TYR | A | 197 | 178.154 | 178.464 | 20.033 | 1.00 | 15.79 | A | C |
| ATOM | 619 | CG | TYR | A | 197 | 177.908 | 176.980 | 20.126 | 1.00 | 17.64 | A | C |
| ATOM | 620 | CD1 | TYR | A | 197 | 178.955 | 176.080 | 20.280 | 1.00 | 15.26 | A | C |
| ATOM | 621 | CE1 | TYR | A | 197 | 178.712 | 174.718 | 20.364 | 1.00 | 20.64 | A | C |
| ATOM | 622 | CD2 | TYR | A | 197 | 176.607 | 176.469 | 20.054 | 1.00 | 21.32 | A | C |
| ATOM | 623 | CE2 | TYR | A | 197 | 176.360 | 175.104 | 20.138 | 1.00 | 20.23 | A | C |

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|------|-----|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 624 | CZ | TYR | A | 197 | 177.418 | 174.242 | 20.293 | 1.00 | 20.94 | A | C |
| ATOM | 625 | OH | TYR | A | 197 | 177.185 | 172.900 | 20.387 | 1.00 | 26.42 | A | O |
| ATOM | 626 | C | TYR | A | 197 | 178.174 | 180.481 | 18.561 | 1.00 | 19.88 | A | C |
| ATOM | 627 | O | TYR | A | 197 | 177.180 | 181.193 | 18.454 | 1.00 | 19.95 | A | O |
| ATOM | 628 | N | GLY | A | 198 | 179.394 | 180.985 | 18.611 | 1.00 | 20.35 | A | N |
| ATOM | 629 | CA | GLY | A | 198 | 179.542 | 182.425 | 18.562 | 1.00 | 20.00 | A | C |
| ATOM | 630 | C | GLY | A | 198 | 180.984 | 182.838 | 18.642 | 1.00 | 17.90 | A | C |
| ATOM | 631 | O | GLY | A | 198 | 181.874 | 182.005 | 18.677 | 1.00 | 19.17 | A | O |
| ATOM | 632 | N | TYR | A | 199 | 181.222 | 184.134 | 18.686 | 1.00 | 17.72 | A | N |
| ATOM | 633 | CA | TYR | A | 199 | 182.589 | 184.593 | 18.748 | 1.00 | 19.93 | A | C |
| ATOM | 634 | CB | TYR | A | 199 | 183.128 | 184.776 | 17.325 | 1.00 | 19.83 | A | C |
| ATOM | 635 | CG | TYR | A | 199 | 182.894 | 186.166 | 16.788 | 1.00 | 21.41 | A | C |
| ATOM | 636 | CD1 | TYR | A | 199 | 183.892 | 187.135 | 16.885 | 1.00 | 21.65 | A | C |
| ATOM | 637 | CE1 | TYR | A | 199 | 183.677 | 188.430 | 16.486 | 1.00 | 22.65 | A | C |
| ATOM | 638 | CD2 | TYR | A | 199 | 181.660 | 186.538 | 16.266 | 1.00 | 18.59 | A | C |
| ATOM | 639 | CE2 | TYR | A | 199 | 181.426 | 187.841 | 15.862 | 1.00 | 22.04 | A | C |
| ATOM | 640 | CZ | TYR | A | 199 | 182.439 | 188.787 | 15.972 | 1.00 | 23.54 | A | C |
| ATOM | 641 | OH | TYR | A | 199 | 182.223 | 190.089 | 15.557 | 1.00 | 24.04 | A | O |
| ATOM | 642 | C | TYR | A | 199 | 182.693 | 185.910 | 19.508 | 1.00 | 19.03 | A | C |
| ATOM | 643 | O | TYR | A | 199 | 181.703 | 186.618 | 19.699 | 1.00 | 19.48 | A | O |
| ATOM | 644 | N | PHE | A | 200 | 183.910 | 186.238 | 19.920 | 1.00 | 18.13 | A | N |
| ATOM | 645 | CA | PHE | A | 200 | 184.177 | 187.478 | 20.627 | 1.00 | 17.58 | A | C |
| ATOM | 646 | CB | PHE | A | 200 | 183.677 | 187.397 | 22.091 | 1.00 | 12.35 | A | C |
| ATOM | 647 | CG | PHE | A | 200 | 184.369 | 186.344 | 22.955 | 1.00 | 13.81 | A | C |
| ATOM | 648 | CD1 | PHE | A | 200 | 185.449 | 186.685 | 23.779 | 1.00 | 14.44 | A | C |
| ATOM | 649 | CD2 | PHE | A | 200 | 183.898 | 185.033 | 22.998 | 1.00 | 12.16 | A | C |
| ATOM | 650 | CE1 | PHE | A | 200 | 186.043 | 185.731 | 24.636 | 1.00 | 13.44 | A | C |
| ATOM | 651 | CE2 | PHE | A | 200 | 184.474 | 184.075 | 23.845 | 1.00 | 13.42 | A | C |
| ATOM | 652 | CZ | PHE | A | 200 | 185.552 | 184.426 | 24.669 | 1.00 | 13.28 | A | C |
| ATOM | 653 | C | PHE | A | 200 | 185.675 | 187.756 | 20.549 | 1.00 | 18.86 | A | C |
| ATOM | 654 | O | PHE | A | 200 | 186.482 | 186.840 | 20.451 | 1.00 | 24.13 | A | O |
| ATOM | 655 | N | HIS | A | 201 | 186.056 | 189.019 | 20.573 | 1.00 | 19.06 | A | N |
| ATOM | 656 | CA | HIS | A | 201 | 187.467 | 189.335 | 20.512 | 1.00 | 22.05 | A | C |
| ATOM | 657 | CB | HIS | A | 201 | 187.820 | 189.966 | 19.159 | 1.00 | 20.51 | A | C |
| ATOM | 658 | CG | HIS | A | 201 | 187.161 | 191.286 | 18.903 | 1.00 | 18.99 | A | C |
| ATOM | 659 | CD2 | HIS | A | 201 | 185.922 | 191.593 | 18.450 | 1.00 | 19.83 | A | C |
| ATOM | 660 | ND1 | HIS | A | 201 | 187.848 | 192.478 | 18.965 | 1.00 | 21.28 | A | N |
| ATOM | 661 | CE1 | HIS | A | 201 | 187.071 | 193.459 | 18.544 | 1.00 | 19.32 | A | C |
| ATOM | 662 | NE2 | HIS | A | 201 | 185.896 | 192.948 | 18.223 | 1.00 | 20.12 | A | N |
| ATOM | 663 | C | HIS | A | 201 | 187.840 | 190.279 | 21.629 | 1.00 | 22.96 | A | C |
| ATOM | 664 | O | HIS | A | 201 | 186.977 | 190.871 | 22.253 | 1.00 | 23.67 | A | O |
| ATOM | 665 | N | ASP | A | 202 | 189.126 | 190.395 | 21.913 | 1.00 | 23.03 | A | N |
| ATOM | 666 | CA | ASP | A | 202 | 189.535 | 191.331 | 22.936 | 1.00 | 24.25 | A | C |
| ATOM | 667 | CB | ASP | A | 202 | 189.928 | 190.621 | 24.235 | 1.00 | 25.39 | A | C |
| ATOM | 668 | CG | ASP | A | 202 | 191.175 | 189.780 | 24.097 | 1.00 | 28.38 | A | C |
| ATOM | 669 | OD1 | ASP | A | 202 | 191.836 | 189.826 | 23.031 | 1.00 | 34.60 | A | O |
| ATOM | 670 | OD2 | ASP | A | 202 | 191.495 | 189.066 | 25.067 | 1.00 | 24.71 | A | O |
| ATOM | 671 | C | ASP | A | 202 | 190.696 | 192.148 | 22.398 | 1.00 | 25.07 | A | C |
| ATOM | 672 | O | ASP | A | 202 | 190.896 | 192.235 | 21.193 | 1.00 | 24.05 | A | O |
| ATOM | 673 | N | ALA | A | 203 | 191.480 | 192.733 | 23.287 | 1.00 | 26.38 | A | N |
| ATOM | 674 | CA | ALA | A | 203 | 192.595 | 193.564 | 22.856 | 1.00 | 25.39 | A | C |
| ATOM | 675 | CB | ALA | A | 203 | 193.217 | 194.257 | 24.082 | 1.00 | 23.30 | A | C |
| ATOM | 676 | C | ALA | A | 203 | 193.678 | 192.847 | 22.039 | 1.00 | 25.31 | A | C |
| ATOM | 677 | O | ALA | A | 203 | 194.184 | 193.405 | 21.070 | 1.00 | 24.76 | A | O |
| ATOM | 678 | N | THR | A | 204 | 194.038 | 191.623 | 22.409 | 1.00 | 24.17 | A | N |
| ATOM | 679 | CA | THR | A | 204 | 195.084 | 190.922 | 21.682 | 1.00 | 24.93 | A | C |
| ATOM | 680 | CB | THR | A | 204 | 196.202 | 190.467 | 22.631 | 1.00 | 28.17 | A | C |
| ATOM | 681 | OG1 | THR | A | 204 | 195.667 | 189.534 | 23.582 | 1.00 | 29.58 | A | O |
| ATOM | 682 | CG2 | THR | A | 204 | 196.805 | 191.672 | 23.364 | 1.00 | 26.38 | A | C |
| ATOM | 683 | C | THR | A | 204 | 194.638 | 189.711 | 20.869 | 1.00 | 26.55 | A | C |
| ATOM | 684 | O | THR | A | 204 | 195.360 | 189.270 | 19.968 | 1.00 | 25.70 | A | O |
| ATOM | 685 | N | ARG | A | 205 | 193.469 | 189.149 | 21.166 | 1.00 | 26.89 | A | N |
| ATOM | 686 | CA | ARG | A | 205 | 193.039 | 188.002 | 20.382 | 1.00 | 26.09 | A | C |
| ATOM | 687 | CB | ARG | A | 205 | 193.558 | 186.710 | 21.026 | 1.00 | 29.89 | A | C |
| ATOM | 688 | CG | ARG | A | 205 | 193.403 | 186.595 | 22.508 | 1.00 | 35.65 | A | C |
| ATOM | 689 | CD | ARG | A | 205 | 194.768 | 186.465 | 23.174 | 1.00 | 41.67 | A | C |
| ATOM | 690 | NE | ARG | A | 205 | 194.650 | 186.517 | 24.630 | 1.00 | 50.08 | A | N |
| ATOM | 691 | CZ | ARG | A | 205 | 195.657 | 186.756 | 25.467 | 1.00 | 53.61 | A | C |
| ATOM | 692 | NH1 | ARG | A | 205 | 196.884 | 186.972 | 24.997 | 1.00 | 54.63 | A | N |
| ATOM | 693 | NH2 | ARG | A | 205 | 195.429 | 186.782 | 26.781 | 1.00 | 57.41 | A | N |

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|------|-----|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 694 | C | ARG | A | 205 | 191.561 | 187.869 | 20.036 | 1.00 | 23.76 | A | C |
| ATOM | 695 | O | ARG | A | 205 | 190.728 | 188.654 | 20.478 | 1.00 | 26.35 | A | O |
| ATOM | 696 | N | VAL | A | 206 | 191.253 | 186.892 | 19.187 | 1.00 | 21.67 | A | N |
| ATOM | 697 | CA | VAL | A | 206 | 189.883 | 186.606 | 18.776 | 1.00 | 17.07 | A | C |
| ATOM | 698 | CB | VAL | A | 206 | 189.704 | 186.683 | 17.247 | 1.00 | 16.64 | A | C |
| ATOM | 699 | CG1 | VAL | A | 206 | 188.235 | 186.422 | 16.888 | 1.00 | 11.75 | A | C |
| ATOM | 700 | CG2 | VAL | A | 206 | 190.136 | 188.055 | 16.741 | 1.00 | 15.29 | A | C |
| ATOM | 701 | C | VAL | A | 206 | 189.541 | 185.179 | 19.225 | 1.00 | 16.35 | A | C |
| ATOM | 702 | O | VAL | A | 206 | 190.380 | 184.277 | 19.146 | 1.00 | 15.34 | A | O |
| ATOM | 703 | N | TYR | A | 207 | 188.308 | 184.987 | 19.688 | 1.00 | 15.70 | A | N |
| ATOM | 704 | CA | TYR | A | 207 | 187.866 | 183.692 | 20.185 | 1.00 | 14.78 | A | C |
| ATOM | 705 | CB | TYR | A | 207 | 187.555 | 183.754 | 21.686 | 1.00 | 14.30 | A | C |
| ATOM | 706 | CG | TYR | A | 207 | 188.599 | 184.415 | 22.538 | 1.00 | 15.34 | A | C |
| ATOM | 707 | CD1 | TYR | A | 207 | 188.725 | 185.809 | 22.565 | 1.00 | 15.56 | A | C |
| ATOM | 708 | CE1 | TYR | A | 207 | 189.669 | 186.433 | 23.389 | 1.00 | 14.72 | A | C |
| ATOM | 709 | CD2 | TYR | A | 207 | 189.445 | 183.655 | 23.347 | 1.00 | 13.39 | A | C |
| ATOM | 710 | CE2 | TYR | A | 207 | 190.393 | 184.263 | 24.174 | 1.00 | 15.70 | A | C |
| ATOM | 711 | CZ | TYR | A | 207 | 190.497 | 185.652 | 24.192 | 1.00 | 16.96 | A | C |
| ATOM | 712 | OH | TYR | A | 207 | 191.413 | 186.252 | 25.028 | 1.00 | 17.44 | A | O |
| ATOM | 713 | C | TYR | A | 207 | 186.624 | 183.132 | 19.506 | 1.00 | 14.64 | A | C |
| ATOM | 714 | O | TYR | A | 207 | 185.604 | 183.807 | 19.390 | 1.00 | 14.86 | A | O |
| ATOM | 715 | N | LEU | A | 208 | 186.716 | 181.882 | 19.082 | 1.00 | 12.98 | A | N |
| ATOM | 716 | CA | LEU | A | 208 | 185.597 | 181.206 | 18.475 | 1.00 | 11.35 | A | C |
| ATOM | 717 | CB | LEU | A | 208 | 186.025 | 180.515 | 17.181 | 1.00 | 12.38 | A | C |
| ATOM | 718 | CG | LEU | A | 208 | 186.790 | 181.296 | 16.101 | 1.00 | 18.53 | A | C |
| ATOM | 719 | CD1 | LEU | A | 208 | 186.415 | 180.695 | 14.759 | 1.00 | 13.01 | A | C |
| ATOM | 720 | CD2 | LEU | A | 208 | 186.466 | 182.794 | 16.118 | 1.00 | 17.18 | A | C |
| ATOM | 721 | C | LEU | A | 208 | 185.092 | 180.162 | 19.473 | 1.00 | 11.42 | A | C |
| ATOM | 722 | O | LEU | A | 208 | 185.875 | 179.354 | 19.978 | 1.00 | 9.69 | A | O |
| ATOM | 723 | N | ILE | A | 209 | 183.789 | 180.194 | 19.753 | 1.00 | 11.10 | A | N |
| ATOM | 724 | CA | ILE | A | 209 | 183.146 | 179.268 | 20.670 | 1.00 | 10.69 | A | C |
| ATOM | 725 | CB | ILE | A | 209 | 181.968 | 179.962 | 21.389 | 1.00 | 13.97 | A | C |
| ATOM | 726 | CG2 | ILE | A | 209 | 181.316 | 178.980 | 22.422 | 1.00 | 10.28 | A | C |
| ATOM | 727 | CG1 | ILE | A | 209 | 182.489 | 181.303 | 21.979 | 1.00 | 14.77 | A | C |
| ATOM | 728 | CD1 | ILE | A | 209 | 181.466 | 182.209 | 22.621 | 1.00 | 10.27 | A | C |
| ATOM | 729 | C | ILE | A | 209 | 182.659 | 178.124 | 19.785 | 1.00 | 13.02 | A | C |
| ATOM | 730 | O | ILE | A | 209 | 181.689 | 178.238 | 19.040 | 1.00 | 13.94 | A | O |
| ATOM | 731 | N | LEU | A | 210 | 183.373 | 177.019 | 19.856 | 1.00 | 12.66 | A | N |
| ATOM | 732 | CA | LEU | A | 210 | 183.065 | 175.867 | 19.044 | 1.00 | 13.21 | A | C |
| ATOM | 733 | CB | LEU | A | 210 | 184.348 | 175.383 | 18.375 | 1.00 | 13.93 | A | C |
| ATOM | 734 | CG | LEU | A | 210 | 185.046 | 176.317 | 17.381 | 1.00 | 16.57 | A | C |
| ATOM | 735 | CD1 | LEU | A | 210 | 186.507 | 175.915 | 17.264 | 1.00 | 14.44 | A | C |
| ATOM | 736 | CD2 | LEU | A | 210 | 184.351 | 176.245 | 16.022 | 1.00 | 12.75 | A | C |
| ATOM | 737 | C | LEU | A | 210 | 182.464 | 174.731 | 19.841 | 1.00 | 10.33 | A | C |
| ATOM | 738 | O | LEU | A | 210 | 182.591 | 174.664 | 21.053 | 1.00 | 14.25 | A | O |
| ATOM | 739 | N | GLU | A | 211 | 181.784 | 173.843 | 19.139 | 1.00 | 11.52 | A | N |
| ATOM | 740 | CA | GLU | A | 211 | 181.218 | 172.646 | 19.739 | 1.00 | 12.06 | A | C |
| ATOM | 741 | CB | GLU | A | 211 | 180.272 | 171.970 | 18.751 | 1.00 | 15.25 | A | C |
| ATOM | 742 | CG | GLU | A | 211 | 180.147 | 170.462 | 18.927 | 1.00 | 16.63 | A | C |
| ATOM | 743 | CD | GLU | A | 211 | 179.379 | 169.783 | 17.784 | 1.00 | 23.31 | A | C |
| ATOM | 744 | OE1 | GLU | A | 211 | 179.201 | 168.531 | 17.837 | 1.00 | 22.59 | A | O |
| ATOM | 745 | OE2 | GLU | A | 211 | 178.954 | 170.500 | 16.829 | 1.00 | 22.15 | A | O |
| ATOM | 746 | C | GLU | A | 211 | 182.424 | 171.723 | 20.009 | 1.00 | 14.58 | A | C |
| ATOM | 747 | O | GLU | A | 211 | 183.296 | 171.561 | 19.156 | 1.00 | 11.41 | A | O |
| ATOM | 748 | N | TYR | A | 212 | 182.466 | 171.133 | 21.196 | 1.00 | 13.40 | A | N |
| ATOM | 749 | CA | TYR | A | 212 | 183.555 | 170.247 | 21.589 | 1.00 | 15.01 | A | C |
| ATOM | 750 | CB | TYR | A | 212 | 183.541 | 170.072 | 23.108 | 1.00 | 16.32 | A | C |
| ATOM | 751 | CG | TYR | A | 212 | 184.387 | 168.938 | 23.679 | 1.00 | 18.16 | A | C |
| ATOM | 752 | CD1 | TYR | A | 212 | 185.744 | 168.820 | 23.391 | 1.00 | 15.83 | A | C |
| ATOM | 753 | CE1 | TYR | A | 212 | 186.528 | 167.845 | 24.013 | 1.00 | 16.35 | A | C |
| ATOM | 754 | CD2 | TYR | A | 212 | 183.829 | 168.042 | 24.601 | 1.00 | 18.49 | A | C |
| ATOM | 755 | CE2 | TYR | A | 212 | 184.590 | 167.074 | 25.223 | 1.00 | 16.40 | A | C |
| ATOM | 756 | CZ | TYR | A | 212 | 185.934 | 166.973 | 24.934 | 1.00 | 19.22 | A | C |
| ATOM | 757 | OH | TYR | A | 212 | 186.655 | 165.995 | 25.594 | 1.00 | 15.81 | A | O |
| ATOM | 758 | C | TYR | A | 212 | 183.463 | 168.889 | 20.909 | 1.00 | 15.14 | A | C |
| ATOM | 759 | O | TYR | A | 212 | 182.414 | 168.259 | 20.920 | 1.00 | 14.66 | A | O |
| ATOM | 760 | N | ALA | A | 213 | 184.561 | 168.451 | 20.297 | 1.00 | 15.74 | A | N |
| ATOM | 761 | CA | ALA | A | 213 | 184.623 | 167.142 | 19.636 | 1.00 | 14.66 | A | C |
| ATOM | 762 | CB | ALA | A | 213 | 185.341 | 167.270 | 18.302 | 1.00 | 16.59 | A | C |
| ATOM | 763 | C | ALA | A | 213 | 185.417 | 166.270 | 20.615 | 1.00 | 16.61 | A | C |

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|------|-----|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 764 | O | ALA | A | 213 | 186.638 | 166.352 | 20.682 | 1.00 | 16.21 | | |
| ATOM | 765 | N | PRO | A | 214 | 184.724 | 165.418 | 21.380 | 1.00 | 15.97 | A | O |
| ATOM | 766 | CD | PRO | A | 214 | 183.323 | 165.077 | 21.082 | 1.00 | 15.58 | A | N |
| ATOM | 767 | CA | PRO | A | 214 | 185.258 | 164.515 | 22.398 | 1.00 | 15.31 | A | C |
| ATOM | 768 | CB | PRO | A | 214 | 184.000 | 163.837 | 22.963 | 1.00 | 14.60 | A | C |
| ATOM | 769 | CG | PRO | A | 214 | 182.844 | 164.624 | 22.417 | 1.00 | 17.26 | A | C |
| ATOM | 770 | C | PRO | A | 214 | 186.319 | 163.472 | 22.000 | 1.00 | 17.90 | A | C |
| ATOM | 771 | O | PRO | A | 214 | 187.172 | 163.152 | 22.829 | 1.00 | 18.00 | A | O |
| ATOM | 772 | N | LEU | A | 215 | 186.274 | 162.922 | 20.777 | 1.00 | 14.95 | A | N |
| ATOM | 773 | CA | LEU | A | 215 | 187.214 | 161.880 | 20.362 | 1.00 | 14.66 | A | C |
| ATOM | 774 | CB | LEU | A | 215 | 186.453 | 160.710 | 19.692 | 1.00 | 16.00 | A | C |
| ATOM | 775 | CG | LEU | A | 215 | 185.316 | 160.072 | 20.536 | 1.00 | 22.00 | A | C |
| ATOM | 776 | CD1 | LEU | A | 215 | 184.664 | 158.818 | 19.898 | 1.00 | 17.85 | A | C |
| ATOM | 777 | CD2 | LEU | A | 215 | 185.906 | 159.717 | 21.877 | 1.00 | 20.55 | A | C |
| ATOM | 778 | C | LEU | A | 215 | 188.415 | 162.306 | 19.505 | 1.00 | 14.59 | A | C |
| ATOM | 779 | O | LEU | A | 215 | 189.093 | 161.477 | 18.905 | 1.00 | 14.29 | A | O |
| ATOM | 780 | N | GLY | A | 216 | 188.691 | 163.603 | 19.455 | 1.00 | 16.74 | A | N |
| ATOM | 781 | CA | GLY | A | 216 | 189.836 | 164.070 | 18.694 | 1.00 | 14.83 | A | C |
| ATOM | 782 | C | GLY | A | 216 | 189.701 | 164.060 | 17.184 | 1.00 | 13.54 | A | C |
| ATOM | 783 | O | GLY | A | 216 | 188.597 | 164.008 | 16.656 | 1.00 | 12.48 | A | O |
| ATOM | 784 | N | THR | A | 217 | 190.843 | 164.091 | 16.497 | 1.00 | 12.97 | A | N |
| ATOM | 785 | CA | THR | A | 217 | 190.867 | 164.136 | 15.044 | 1.00 | 14.08 | A | C |
| ATOM | 786 | CB | THR | A | 217 | 192.005 | 164.998 | 14.503 | 1.00 | 14.49 | A | C |
| ATOM | 787 | OG1 | THR | A | 217 | 193.242 | 164.310 | 14.733 | 1.00 | 16.68 | A | O |
| ATOM | 788 | CG2 | THR | A | 217 | 192.043 | 166.347 | 15.167 | 1.00 | 10.84 | A | C |
| ATOM | 789 | C | THR | A | 217 | 191.060 | 162.811 | 14.347 | 1.00 | 16.46 | A | C |
| ATOM | 790 | O | THR | A | 217 | 191.741 | 161.910 | 14.849 | 1.00 | 15.02 | A | O |
| ATOM | 791 | N | VAL | A | 218 | 190.481 | 162.721 | 13.153 | 1.00 | 16.27 | A | N |
| ATOM | 792 | CA | VAL | A | 218 | 190.616 | 161.533 | 12.340 | 1.00 | 15.99 | A | C |
| ATOM | 793 | CB | VAL | A | 218 | 189.802 | 161.683 | 11.038 | 1.00 | 16.57 | A | C |
| ATOM | 794 | CG1 | VAL | A | 218 | 190.263 | 160.649 | 9.999 | 1.00 | 18.56 | A | C |
| ATOM | 795 | CG2 | VAL | A | 218 | 188.339 | 161.504 | 11.349 | 1.00 | 11.27 | A | C |
| ATOM | 796 | C | VAL | A | 218 | 192.117 | 161.366 | 12.051 | 1.00 | 16.41 | A | C |
| ATOM | 797 | O | VAL | A | 218 | 192.611 | 160.255 | 11.896 | 1.00 | 15.84 | A | O |
| ATOM | 798 | N | TYR | A | 219 | 192.826 | 162.487 | 12.008 | 1.00 | 15.85 | A | N |
| ATOM | 799 | CA | TYR | A | 219 | 194.261 | 162.509 | 11.789 | 1.00 | 16.76 | A | C |
| ATOM | 800 | CB | TYR | A | 219 | 194.771 | 163.937 | 11.908 | 1.00 | 18.52 | A | C |
| ATOM | 801 | CG | TYR | A | 219 | 196.259 | 164.024 | 11.800 | 1.00 | 19.33 | A | C |
| ATOM | 802 | CD1 | TYR | A | 219 | 196.870 | 163.870 | 10.570 | 1.00 | 17.55 | A | C |
| ATOM | 803 | CE1 | TYR | A | 219 | 198.249 | 163.929 | 10.450 | 1.00 | 23.59 | A | C |
| ATOM | 804 | CD2 | TYR | A | 219 | 197.065 | 164.236 | 12.936 | 1.00 | 21.27 | A | C |
| ATOM | 805 | CE2 | TYR | A | 219 | 198.454 | 164.289 | 12.834 | 1.00 | 20.92 | A | C |
| ATOM | 806 | CZ | TYR | A | 219 | 199.032 | 164.136 | 11.584 | 1.00 | 24.53 | A | C |
| ATOM | 807 | OH | TYR | A | 219 | 200.392 | 164.188 | 11.448 | 1.00 | 28.22 | A | O |
| ATOM | 808 | C | TYR | A | 219 | 194.999 | 161.661 | 12.826 | 1.00 | 18.49 | A | C |
| ATOM | 809 | O | TYR | A | 219 | 195.910 | 160.888 | 12.494 | 1.00 | 18.32 | A | O |
| ATOM | 810 | N | ARG | A | 220 | 194.617 | 161.836 | 14.086 | 1.00 | 16.66 | A | N |
| ATOM | 811 | CA | ARG | A | 220 | 195.247 | 161.100 | 15.154 | 1.00 | 19.76 | A | C |
| ATOM | 812 | CB | ARG | A | 220 | 194.848 | 161.674 | 16.514 | 1.00 | 22.26 | A | C |
| ATOM | 813 | CG | ARG | A | 220 | 195.514 | 160.949 | 17.669 | 1.00 | 27.26 | A | C |
| ATOM | 814 | CD | ARG | A | 220 | 197.039 | 161.124 | 17.660 | 1.00 | 29.11 | A | C |
| ATOM | 815 | NE | ARG | A | 220 | 197.689 | 160.200 | 18.595 | 1.00 | 32.84 | A | N |
| ATOM | 816 | CZ | ARG | A | 220 | 199.003 | 160.005 | 18.702 | 1.00 | 35.53 | A | C |
| ATOM | 817 | NH1 | ARG | A | 220 | 199.867 | 160.669 | 17.931 | 1.00 | 39.53 | A | N |
| ATOM | 818 | NH2 | ARG | A | 220 | 199.449 | 159.129 | 19.594 | 1.00 | 36.11 | A | N |
| ATOM | 819 | C | ARG | A | 220 | 194.908 | 159.608 | 15.088 | 1.00 | 19.85 | A | C |
| ATOM | 820 | O | ARG | A | 220 | 195.768 | 158.748 | 15.322 | 1.00 | 19.84 | A | O |
| ATOM | 821 | N | GLU | A | 221 | 193.661 | 159.309 | 14.746 | 1.00 | 19.44 | A | N |
| ATOM | 822 | CA | GLU | A | 221 | 193.192 | 157.935 | 14.628 | 1.00 | 21.14 | A | C |
| ATOM | 823 | CB | GLU | A | 221 | 191.670 | 157.930 | 14.386 | 1.00 | 22.94 | A | C |
| ATOM | 824 | CG | GLU | A | 221 | 190.968 | 156.594 | 14.519 | 1.00 | 27.24 | A | C |
| ATOM | 825 | CD | GLU | A | 221 | 191.078 | 155.998 | 15.918 | 1.00 | 30.92 | A | C |
| ATOM | 826 | OE1 | GLU | A | 221 | 190.736 | 154.798 | 16.073 | 1.00 | 35.57 | A | O |
| ATOM | 827 | OE2 | GLU | A | 221 | 191.502 | 156.716 | 16.857 | 1.00 | 31.40 | A | O |
| ATOM | 828 | C | GLU | A | 221 | 193.930 | 157.268 | 13.465 | 1.00 | 22.03 | A | C |
| ATOM | 829 | O | GLU | A | 221 | 194.201 | 156.061 | 13.493 | 1.00 | 21.79 | A | O |
| ATOM | 830 | N | LEU | A | 222 | 194.257 | 158.060 | 12.442 | 1.00 | 20.91 | A | N |
| ATOM | 831 | CA | LEU | A | 222 | 194.969 | 157.533 | 11.287 | 1.00 | 13.01 | A | C |
| ATOM | 832 | CB | LEU | A | 222 | 194.838 | 158.485 | 10.079 | 1.00 | 17.83 | A | C |
| ATOM | 833 | CG | LEU | A | 222 | 195.181 | 157.923 | 8.676 | 1.00 | 21.87 | A | C |

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| ATOM | 834 | CD1 | LEU | A | 222 | 194.366 | 156.652 | 8.358 | 1.00 | 17.44 | A | C |
| ATOM | 835 | CD2 | LEU | A | 222 | 194.892 | 159.007 | 7.634 | 1.00 | 19.79 | A | C |
| ATOM | 836 | C | LEU | A | 222 | 196.439 | 157.261 | 11.639 | 1.00 | 16.91 | A | C |
| ATOM | 837 | O | LEU | A | 222 | 197.012 | 156.317 | 11.119 | 1.00 | 16.89 | A | O |
| ATOM | 838 | N | GLN | A | 223 | 197.062 | 158.066 | 12.503 | 1.00 | 16.66 | A | N |
| ATOM | 839 | CA | GLN | A | 223 | 198.446 | 157.769 | 12.900 | 1.00 | 17.24 | A | C |
| ATOM | 840 | CB | GLN | A | 223 | 199.022 | 158.808 | 13.850 | 1.00 | 19.18 | A | C |
| ATOM | 841 | CG | GLN | A | 223 | 199.250 | 160.205 | 13.317 | 1.00 | 28.34 | A | C |
| ATOM | 842 | CD | GLN | A | 223 | 199.954 | 161.058 | 14.355 | 1.00 | 31.88 | A | C |
| ATOM | 843 | OE1 | GLN | A | 223 | 199.437 | 161.241 | 15.474 | 1.00 | 31.86 | A | O |
| ATOM | 844 | NE2 | GLN | A | 223 | 201.149 | 161.584 | 14.005 | 1.00 | 34.43 | A | N |
| ATOM | 845 | C | GLN | A | 223 | 198.456 | 156.448 | 13.688 | 1.00 | 21.01 | A | C |
| ATOM | 846 | O | GLN | A | 223 | 199.360 | 155.630 | 13.523 | 1.00 | 18.77 | A | O |
| ATOM | 847 | N | LYS | A | 224 | 197.464 | 156.277 | 14.570 | 1.00 | 21.30 | A | N |
| ATOM | 848 | CA | LYS | A | 224 | 197.357 | 155.099 | 15.419 | 1.00 | 21.07 | A | C |
| ATOM | 849 | CB | LYS | A | 224 | 196.258 | 155.300 | 16.492 | 1.00 | 24.80 | A | C |
| ATOM | 850 | CG | LYS | A | 224 | 196.479 | 156.522 | 17.399 | 1.00 | 26.43 | A | C |
| ATOM | 851 | CD | LYS | A | 224 | 195.427 | 156.642 | 18.505 | 1.00 | 30.49 | A | C |
| ATOM | 852 | CE | LYS | A | 224 | 195.834 | 157.727 | 19.507 | 1.00 | 31.44 | A | C |
| ATOM | 853 | NZ | LYS | A | 224 | 194.917 | 157.868 | 20.668 | 1.00 | 33.32 | A | N |
| ATOM | 854 | C | LYS | A | 224 | 197.088 | 153.812 | 14.647 | 1.00 | 20.29 | A | C |
| ATOM | 855 | O | LYS | A | 224 | 197.799 | 152.829 | 14.821 | 1.00 | 19.90 | A | O |
| ATOM | 856 | N | LEU | A | 225 | 196.059 | 153.800 | 13.806 | 1.00 | 20.45 | A | N |
| ATOM | 857 | CA | LEU | A | 225 | 195.753 | 152.603 | 13.039 | 1.00 | 18.46 | A | C |
| ATOM | 858 | CB | LEU | A | 225 | 194.272 | 152.588 | 12.615 | 1.00 | 20.03 | A | C |
| ATOM | 859 | CG | LEU | A | 225 | 193.224 | 152.691 | 13.740 | 1.00 | 24.89 | A | C |
| ATOM | 860 | CD1 | LEU | A | 225 | 191.784 | 152.656 | 13.213 | 1.00 | 20.57 | A | C |
| ATOM | 861 | CD2 | LEU | A | 225 | 193.462 | 151.543 | 14.674 | 1.00 | 26.58 | A | C |
| ATOM | 862 | C | LEU | A | 225 | 196.631 | 152.464 | 11.780 | 1.00 | 19.83 | A | C |
| ATOM | 863 | O | LEU | A | 225 | 196.694 | 151.381 | 11.186 | 1.00 | 20.09 | A | O |
| ATOM | 864 | N | SER | A | 226 | 197.296 | 153.545 | 11.375 | 1.00 | 18.33 | A | N |
| ATOM | 865 | CA | SER | A | 226 | 198.137 | 153.578 | 10.158 | 1.00 | 21.51 | A | C |
| ATOM | 866 | CB | SER | A | 226 | 199.160 | 152.426 | 10.124 | 1.00 | 21.48 | A | C |
| ATOM | 867 | OG | SER | A | 226 | 200.116 | 152.533 | 11.177 | 1.00 | 27.63 | A | O |
| ATOM | 868 | C | SER | A | 226 | 197.295 | 153.542 | 8.871 | 1.00 | 20.48 | A | C |
| ATOM | 869 | O | SER | A | 226 | 197.566 | 154.284 | 7.927 | 1.00 | 19.41 | A | O |
| ATOM | 870 | N | LYS | A | 227 | 196.290 | 152.664 | 8.838 | 1.00 | 20.02 | A | N |
| ATOM | 871 | CA | LYS | A | 227 | 195.358 | 152.524 | 7.697 | 1.00 | 19.86 | A | C |
| ATOM | 872 | CB | LYS | A | 227 | 195.668 | 151.280 | 6.876 | 1.00 | 24.72 | A | C |
| ATOM | 873 | CG | LYS | A | 227 | 196.854 | 151.364 | 5.990 | 1.00 | 29.64 | A | C |
| ATOM | 874 | CD | LYS | A | 227 | 197.148 | 149.990 | 5.419 | 1.00 | 35.21 | A | C |
| ATOM | 875 | CE | LYS | A | 227 | 198.330 | 150.088 | 4.465 | 1.00 | 41.32 | A | C |
| ATOM | 876 | NZ | LYS | A | 227 | 198.843 | 148.758 | 4.016 | 1.00 | 43.82 | A | N |
| ATOM | 877 | C | LYS | A | 227 | 193.970 | 152.303 | 8.274 | 1.00 | 16.62 | A | C |
| ATOM | 878 | O | LYS | A | 227 | 193.852 | 151.881 | 9.411 | 1.00 | 18.80 | A | O |
| ATOM | 879 | N | PHE | A | 228 | 192.930 | 152.584 | 7.499 | 1.00 | 14.54 | A | N |
| ATOM | 880 | CA | PHE | A | 228 | 191.548 | 152.342 | 7.932 | 1.00 | 15.70 | A | C |
| ATOM | 881 | CB | PHE | A | 228 | 190.665 | 153.590 | 7.729 | 1.00 | 12.09 | A | C |
| ATOM | 882 | CG | PHE | A | 228 | 190.958 | 154.697 | 8.679 | 1.00 | 13.97 | A | C |
| ATOM | 883 | CD1 | PHE | A | 228 | 190.564 | 156.005 | 8.400 | 1.00 | 14.03 | A | C |
| ATOM | 884 | CD2 | PHE | A | 228 | 191.629 | 154.439 | 9.860 | 1.00 | 13.49 | A | C |
| ATOM | 885 | CE1 | PHE | A | 228 | 190.844 | 157.046 | 9.299 | 1.00 | 12.37 | A | C |
| ATOM | 886 | CE2 | PHE | A | 228 | 191.912 | 155.466 | 10.767 | 1.00 | 14.79 | A | C |
| ATOM | 887 | CZ | PHE | A | 228 | 191.520 | 156.772 | 10.487 | 1.00 | 11.50 | A | C |
| ATOM | 888 | C | PHE | A | 228 | 191.051 | 151.227 | 7.016 | 1.00 | 15.70 | A | C |
| ATOM | 889 | O | PHE | A | 228 | 191.399 | 151.212 | 5.833 | 1.00 | 16.89 | A | O |
| ATOM | 890 | N | ASP | A | 229 | 190.261 | 150.290 | 7.536 | 1.00 | 16.61 | A | N |
| ATOM | 891 | CA | ASP | A | 229 | 189.753 | 149.221 | 6.666 | 1.00 | 18.23 | A | C |
| ATOM | 892 | CB | ASP | A | 229 | 189.261 | 148.005 | 7.478 | 1.00 | 17.42 | A | C |
| ATOM | 893 | CG | ASP | A | 229 | 188.092 | 148.325 | 8.369 | 1.00 | 20.41 | A | C |
| ATOM | 894 | OD1 | ASP | A | 229 | 187.161 | 149.024 | 7.930 | 1.00 | 28.20 | A | O |
| ATOM | 895 | OD2 | ASP | A | 229 | 188.072 | 147.859 | 9.511 | 1.00 | 26.24 | A | O |
| ATOM | 896 | C | ASP | A | 229 | 188.624 | 149.817 | 5.810 | 1.00 | 16.57 | A | C |
| ATOM | 897 | O | ASP | A | 229 | 188.322 | 151.006 | 5.939 | 1.00 | 17.37 | A | O |
| ATOM | 898 | N | GLU | A | 230 | 187.998 | 149.020 | 4.952 | 1.00 | 15.33 | A | N |
| ATOM | 899 | CA | GLU | A | 230 | 186.947 | 149.560 | 4.084 | 1.00 | 17.43 | A | C |
| ATOM | 900 | CB | GLU | A | 230 | 186.571 | 148.541 | 3.002 | 1.00 | 16.24 | A | C |
| ATOM | 901 | CG | GLU | A | 230 | 187.743 | 148.066 | 2.153 | 1.00 | 23.01 | A | C |
| ATOM | 902 | CD | GLU | A | 230 | 187.313 | 147.497 | 0.794 | 1.00 | 27.22 | A | C |
| ATOM | 903 | OE1 | GLU | A | 230 | 186.584 | 146.478 | 0.753 | 1.00 | 28.49 | A | O |

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|------|-----|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 904 | OE2 | GLU | A | 230 | 187.711 | 148.085 | -0.244 | 1.00 | 29.45 | A | O |
| ATOM | 905 | C | GLU | A | 230 | 185.680 | 150.062 | 4.783 | 1.00 | 16.70 | A | C |
| ATOM | 906 | O | GLU | A | 230 | 185.141 | 151.099 | 4.419 | 1.00 | 13.33 | A | O |
| ATOM | 907 | N | GLN | A | 231 | 185.209 | 149.326 | 5.782 | 1.00 | 16.53 | A | N |
| ATOM | 908 | CA | GLN | A | 231 | 184.003 | 149.711 | 6.512 | 1.00 | 17.02 | A | C |
| ATOM | 909 | CB | GLN | A | 231 | 183.728 | 148.656 | 7.596 | 1.00 | 15.32 | A | C |
| ATOM | 910 | CG | GLN | A | 231 | 182.370 | 148.737 | 8.289 | 1.00 | 17.56 | A | C |
| ATOM | 911 | CD | GLN | A | 231 | 182.297 | 149.841 | 9.359 | 1.00 | 22.59 | A | C |
| ATOM | 912 | OE1 | GLN | A | 231 | 183.298 | 150.112 | 10.075 | 1.00 | 21.11 | A | O |
| ATOM | 913 | NE2 | GLN | A | 231 | 181.106 | 150.478 | 9.494 | 1.00 | 19.70 | A | N |
| ATOM | 914 | C | GLN | A | 231 | 184.195 | 151.124 | 7.120 | 1.00 | 17.00 | A | C |
| ATOM | 915 | O | GLN | A | 231 | 183.381 | 152.024 | 6.890 | 1.00 | 18.40 | A | O |
| ATOM | 916 | N | ARG | A | 232 | 185.281 | 151.308 | 7.873 | 1.00 | 17.36 | A | N |
| ATOM | 917 | CA | ARG | A | 232 | 185.607 | 152.593 | 8.509 | 1.00 | 17.63 | A | C |
| ATOM | 918 | CB | ARG | A | 232 | 186.905 | 152.465 | 9.307 | 1.00 | 19.87 | A | C |
| ATOM | 919 | CG | ARG | A | 232 | 187.205 | 153.647 | 10.172 | 1.00 | 20.99 | A | C |
| ATOM | 920 | CD | ARG | A | 232 | 186.795 | 153.359 | 11.597 | 1.00 | 28.38 | A | C |
| ATOM | 921 | NE | ARG | A | 232 | 187.588 | 154.189 | 12.487 | 1.00 | 32.23 | A | N |
| ATOM | 922 | CZ | ARG | A | 232 | 188.247 | 153.745 | 13.545 | 1.00 | 31.41 | A | C |
| ATOM | 923 | NH1 | ARG | A | 232 | 188.213 | 152.459 | 13.873 | 1.00 | 29.13 | A | N |
| ATOM | 924 | NH2 | ARG | A | 232 | 188.963 | 154.604 | 14.257 | 1.00 | 35.98 | A | N |
| ATOM | 925 | C | ARG | A | 232 | 185.770 | 153.747 | 7.507 | 1.00 | 14.94 | A | C |
| ATOM | 926 | O | ARG | A | 232 | 185.356 | 154.866 | 7.761 | 1.00 | 12.98 | A | O |
| ATOM | 927 | N | THR | A | 233 | 186.403 | 153.457 | 6.384 | 1.00 | 13.16 | A | N |
| ATOM | 928 | CA | THR | A | 233 | 186.652 | 154.446 | 5.361 | 1.00 | 13.60 | A | C |
| ATOM | 929 | CB | THR | A | 233 | 187.719 | 153.902 | 4.340 | 1.00 | 14.55 | A | C |
| ATOM | 930 | OG1 | THR | A | 233 | 188.937 | 153.623 | 5.048 | 1.00 | 14.87 | A | O |
| ATOM | 931 | CG2 | THR | A | 233 | 188.016 | 154.908 | 3.231 | 1.00 | 13.20 | A | C |
| ATOM | 932 | C | THR | A | 233 | 185.339 | 154.863 | 4.686 | 1.00 | 13.47 | A | C |
| ATOM | 933 | O | THR | A | 233 | 185.090 | 156.056 | 4.508 | 1.00 | 12.81 | A | O |
| ATOM | 934 | N | ALA | A | 234 | 184.481 | 153.901 | 4.353 | 1.00 | 11.54 | A | N |
| ATOM | 935 | CA | ALA | A | 234 | 183.199 | 154.225 | 3.713 | 1.00 | 12.90 | A | C |
| ATOM | 936 | CB | ALA | A | 234 | 182.531 | 152.967 | 3.184 | 1.00 | 6.31 | A | C |
| ATOM | 937 | C | ALA | A | 234 | 182.254 | 154.953 | 4.675 | 1.00 | 15.13 | A | C |
| ATOM | 938 | O | ALA | A | 234 | 181.498 | 155.843 | 4.272 | 1.00 | 18.25 | A | O |
| ATOM | 939 | N | THR | A | 235 | 182.297 | 154.579 | 5.945 | 1.00 | 13.08 | A | N |
| ATOM | 940 | CA | THR | A | 235 | 181.450 | 155.221 | 6.909 | 1.00 | 11.34 | A | C |
| ATOM | 941 | CB | THR | A | 235 | 181.581 | 154.543 | 8.289 | 1.00 | 13.04 | A | C |
| ATOM | 942 | OG1 | THR | A | 235 | 181.181 | 153.167 | 8.177 | 1.00 | 13.03 | A | O |
| ATOM | 943 | CG2 | THR | A | 235 | 180.679 | 155.235 | 9.304 | 1.00 | 9.30 | A | C |
| ATOM | 944 | C | THR | A | 235 | 181.813 | 156.701 | 6.976 | 1.00 | 12.76 | A | C |
| ATOM | 945 | O | THR | A | 235 | 180.930 | 157.553 | 6.894 | 1.00 | 14.21 | A | O |
| ATOM | 946 | N | TYR | A | 236 | 183.104 | 157.003 | 7.115 | 1.00 | 12.83 | A | N |
| ATOM | 947 | CA | TYR | A | 236 | 183.586 | 158.392 | 7.157 | 1.00 | 14.72 | A | C |
| ATOM | 948 | CB | TYR | A | 236 | 185.096 | 158.451 | 7.371 | 1.00 | 16.17 | A | C |
| ATOM | 949 | CG | TYR | A | 236 | 185.572 | 158.175 | 8.772 | 1.00 | 16.12 | A | C |
| ATOM | 950 | CD1 | TYR | A | 236 | 184.785 | 158.491 | 9.876 | 1.00 | 16.03 | A | C |
| ATOM | 951 | CE1 | TYR | A | 236 | 185.237 | 158.261 | 11.162 | 1.00 | 16.90 | A | C |
| ATOM | 952 | CD2 | TYR | A | 236 | 186.830 | 157.626 | 8.993 | 1.00 | 13.79 | A | C |
| ATOM | 953 | CE2 | TYR | A | 236 | 187.290 | 157.397 | 10.266 | 1.00 | 15.98 | A | C |
| ATOM | 954 | CZ | TYR | A | 236 | 186.490 | 157.709 | 11.347 | 1.00 | 19.04 | A | C |
| ATOM | 955 | OH | TYR | A | 236 | 186.935 | 157.420 | 12.609 | 1.00 | 22.33 | A | O |
| ATOM | 956 | C | TYR | A | 236 | 183.291 | 159.154 | 5.862 | 1.00 | 16.50 | A | C |
| ATOM | 957 | O | TYR | A | 236 | 182.873 | 160.311 | 5.898 | 1.00 | 15.39 | A | O |
| ATOM | 958 | N | ILE | A | 237 | 183.536 | 158.517 | 4.718 | 1.00 | 14.99 | A | N |
| ATOM | 959 | CA | ILE | A | 237 | 183.274 | 159.176 | 3.456 | 1.00 | 15.34 | A | C |
| ATOM | 960 | CB | ILE | A | 237 | 183.656 | 158.295 | 2.242 | 1.00 | 15.72 | A | C |
| ATOM | 961 | CG2 | ILE | A | 237 | 183.331 | 159.027 | 0.960 | 1.00 | 17.81 | A | C |
| ATOM | 962 | CG1 | ILE | A | 237 | 185.157 | 157.993 | 2.241 | 1.00 | 13.11 | A | C |
| ATOM | 963 | CD1 | ILE | A | 237 | 186.062 | 159.254 | 2.278 | 1.00 | 13.67 | A | C |
| ATOM | 964 | C | ILE | A | 237 | 181.795 | 159.542 | 3.379 | 1.00 | 17.56 | A | C |
| ATOM | 965 | O | ILE | A | 237 | 181.442 | 160.638 | 2.953 | 1.00 | 18.55 | A | O |
| ATOM | 966 | N | THR | A | 238 | 180.935 | 158.626 | 3.804 | 1.00 | 17.36 | A | N |
| ATOM | 967 | CA | THR | A | 238 | 179.489 | 158.853 | 3.816 | 1.00 | 14.99 | A | C |
| ATOM | 968 | CB | THR | A | 238 | 178.760 | 157.600 | 4.330 | 1.00 | 13.08 | A | C |
| ATOM | 969 | OG1 | THR | A | 238 | 179.059 | 156.502 | 3.464 | 1.00 | 16.26 | A | O |
| ATOM | 970 | CG2 | THR | A | 238 | 177.257 | 157.817 | 4.354 | 1.00 | 13.58 | A | C |
| ATOM | 971 | C | THR | A | 238 | 179.069 | 160.037 | 4.696 | 1.00 | 14.23 | A | C |
| ATOM | 972 | O | THR | A | 238 | 178.214 | 160.829 | 4.307 | 1.00 | 14.27 | A | O |
| ATOM | 973 | N | GLU | A | 239 | 179.649 | 160.149 | 5.888 | 1.00 | 11.63 | A | N |

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|------|------|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 974 | CA | GLU | A | 239 | 179.285 | 161.242 | 6.781 | 1.00 | 13.23 | A | C |
| ATOM | 975 | CB | GLU | A | 239 | 179.913 | 161.025 | 8.170 | 1.00 | 14.00 | A | C |
| ATOM | 976 | CG | GLU | A | 239 | 179.443 | 159.721 | 8.804 | 1.00 | 18.38 | A | C |
| ATOM | 977 | CD | GLU | A | 239 | 180.121 | 159.365 | 10.124 | 1.00 | 24.00 | A | C |
| ATOM | 978 | OE1 | GLU | A | 239 | 181.366 | 159.259 | 10.187 | 1.00 | 24.67 | A | O |
| ATOM | 979 | OE2 | GLU | A | 239 | 179.385 | 159.158 | 11.114 | 1.00 | 32.52 | A | O |
| ATOM | 980 | C | GLU | A | 239 | 179.767 | 162.548 | 6.149 | 1.00 | 13.27 | A | C |
| ATOM | 981 | O | GLU | A | 239 | 179.028 | 163.525 | 6.073 | 1.00 | 12.45 | A | O |
| ATOM | 982 | N | LEU | A | 240 | 181.005 | 162.538 | 5.668 | 1.00 | 11.05 | A | N |
| ATOM | 983 | CA | LEU | A | 240 | 181.566 | 163.707 | 5.049 | 1.00 | 13.29 | A | C |
| ATOM | 984 | CB | LEU | A | 240 | 183.043 | 163.465 | 4.738 | 1.00 | 15.79 | A | C |
| ATOM | 985 | CG | LEU | A | 240 | 183.894 | 164.638 | 4.235 | 1.00 | 16.19 | A | C |
| ATOM | 986 | CD1 | LEU | A | 240 | 184.031 | 165.720 | 5.279 | 1.00 | 19.17 | A | C |
| ATOM | 987 | CD2 | LEU | A | 240 | 185.267 | 164.108 | 3.884 | 1.00 | 19.04 | A | C |
| ATOM | 988 | C | LEU | A | 240 | 180.798 | 164.081 | 3.773 | 1.00 | 13.39 | A | C |
| ATOM | 989 | O | LEU | A | 240 | 180.513 | 165.256 | 3.548 | 1.00 | 14.19 | A | O |
| ATOM | 990 | N | ALA | A | 241 | 180.443 | 163.091 | 2.955 | 1.00 | 11.67 | A | N |
| ATOM | 991 | CA | ALA | A | 241 | 179.726 | 163.372 | 1.711 | 1.00 | 12.50 | A | C |
| ATOM | 992 | CB | ALA | A | 241 | 179.577 | 162.108 | 0.873 | 1.00 | 9.22 | A | C |
| ATOM | 993 | C | ALA | A | 241 | 178.367 | 164.004 | 1.979 | 1.00 | 14.45 | A | C |
| ATOM | 994 | O | ALA | A | 241 | 177.923 | 164.878 | 1.222 | 1.00 | 14.36 | A | O |
| ATOM | 995 | N | ASN | A | 242 | 177.714 | 163.562 | 3.053 | 1.00 | 14.82 | A | N |
| ATOM | 996 | CA | ASN | A | 242 | 176.420 | 164.109 | 3.447 | 1.00 | 16.37 | A | C |
| ATOM | 997 | CB | ASN | A | 242 | 175.822 | 163.329 | 4.619 | 1.00 | 20.05 | A | C |
| ATOM | 998 | CG | ASN | A | 242 | 175.213 | 162.005 | 4.210 | 1.00 | 22.16 | A | C |
| ATOM | 999 | OD1 | ASN | A | 242 | 175.027 | 161.133 | 5.055 | 1.00 | 23.63 | A | O |
| ATOM | 1000 | ND2 | ASN | A | 242 | 174.883 | 161.850 | 2.922 | 1.00 | 24.84 | A | N |
| ATOM | 1001 | C | ASN | A | 242 | 176.623 | 165.540 | 3.918 | 1.00 | 16.87 | A | C |
| ATOM | 1002 | O | ASN | A | 242 | 175.804 | 166.429 | 3.636 | 1.00 | 13.50 | A | O |
| ATOM | 1003 | N | ALA | A | 243 | 177.713 | 165.747 | 4.656 | 1.00 | 13.07 | A | N |
| ATOM | 1004 | CA | ALA | A | 243 | 178.019 | 167.065 | 5.190 | 1.00 | 13.28 | A | C |
| ATOM | 1005 | CB | ALA | A | 243 | 179.204 | 166.982 | 6.137 | 1.00 | 13.95 | A | C |
| ATOM | 1006 | C | ALA | A | 243 | 178.292 | 168.063 | 4.072 | 1.00 | 14.76 | A | C |
| ATOM | 1007 | O | ALA | A | 243 | 177.751 | 169.173 | 4.080 | 1.00 | 11.54 | A | O |
| ATOM | 1008 | N | LEU | A | 244 | 179.126 | 167.651 | 3.113 | 1.00 | 15.34 | A | N |
| ATOM | 1009 | CA | LEU | A | 244 | 179.487 | 168.477 | 1.955 | 1.00 | 14.00 | A | C |
| ATOM | 1010 | CB | LEU | A | 244 | 180.572 | 167.766 | 1.134 | 1.00 | 12.82 | A | C |
| ATOM | 1011 | CG | LEU | A | 244 | 181.958 | 167.607 | 1.791 | 1.00 | 13.66 | A | C |
| ATOM | 1012 | CD1 | LEU | A | 244 | 182.862 | 166.784 | 0.883 | 1.00 | 10.60 | A | C |
| ATOM | 1013 | CD2 | LEU | A | 244 | 182.570 | 168.990 | 2.068 | 1.00 | 10.59 | A | C |
| ATOM | 1014 | C | LEU | A | 244 | 178.245 | 168.764 | 1.078 | 1.00 | 13.84 | A | C |
| ATOM | 1015 | O | LEU | A | 244 | 178.079 | 169.862 | 0.545 | 1.00 | 9.94 | A | O |
| ATOM | 1016 | N | SER | A | 245 | 177.363 | 167.776 | 0.949 | 1.00 | 11.65 | A | N |
| ATOM | 1017 | CA | SER | A | 245 | 176.162 | 167.951 | 0.149 | 1.00 | 12.45 | A | C |
| ATOM | 1018 | CB | SER | A | 245 | 175.403 | 166.623 | 0.101 | 1.00 | 11.63 | A | C |
| ATOM | 1019 | OG | SER | A | 245 | 174.265 | 166.724 | -0.729 | 1.00 | 18.58 | A | O |
| ATOM | 1020 | C | SER | A | 245 | 175.284 | 169.090 | 0.716 | 1.00 | 12.58 | A | C |
| ATOM | 1021 | O | SER | A | 245 | 174.753 | 169.925 | -0.028 | 1.00 | 13.38 | A | O |
| ATOM | 1022 | N | TYR | A | 246 | 175.156 | 169.126 | 2.038 | 1.00 | 10.82 | A | N |
| ATOM | 1023 | CA | TYR | A | 246 | 174.388 | 170.146 | 2.719 | 1.00 | 12.87 | A | C |
| ATOM | 1024 | CB | TYR | A | 246 | 174.337 | 169.838 | 4.232 | 1.00 | 10.92 | A | C |
| ATOM | 1025 | CG | TYR | A | 246 | 173.941 | 171.010 | 5.076 | 1.00 | 13.12 | A | C |
| ATOM | 1026 | CD1 | TYR | A | 246 | 172.615 | 171.398 | 5.169 | 1.00 | 11.79 | A | C |
| ATOM | 1027 | CE1 | TYR | A | 246 | 172.249 | 172.526 | 5.886 | 1.00 | 15.75 | A | C |
| ATOM | 1028 | CD2 | TYR | A | 246 | 174.905 | 171.782 | 5.727 | 1.00 | 14.34 | A | C |
| ATOM | 1029 | CE2 | TYR | A | 246 | 174.548 | 172.925 | 6.452 | 1.00 | 17.65 | A | C |
| ATOM | 1030 | CZ | TYR | A | 246 | 173.209 | 173.288 | 6.526 | 1.00 | 18.09 | A | C |
| ATOM | 1031 | OH | TYR | A | 246 | 172.806 | 174.411 | 7.231 | 1.00 | 20.69 | A | O |
| ATOM | 1032 | C | TYR | A | 246 | 175.068 | 171.506 | 2.474 | 1.00 | 14.69 | A | C |
| ATOM | 1033 | O | TYR | A | 246 | 174.399 | 172.522 | 2.263 | 1.00 | 16.54 | A | O |
| ATOM | 1034 | N | CYS | A | 247 | 176.398 | 171.506 | 2.526 | 1.00 | 12.79 | A | N |
| ATOM | 1035 | CA | CYS | A | 247 | 177.217 | 172.695 | 2.312 | 1.00 | 15.14 | A | C |
| ATOM | 1036 | CB | CYS | A | 247 | 178.697 | 172.339 | 2.453 | 1.00 | 18.30 | A | C |
| ATOM | 1037 | SG | CYS | A | 247 | 179.389 | 172.397 | 4.097 | 1.00 | 20.02 | A | S |
| ATOM | 1038 | C | CYS | A | 247 | 177.033 | 173.298 | 0.930 | 1.00 | 14.64 | A | C |
| ATOM | 1039 | O | CYS | A | 247 | 176.944 | 174.517 | 0.765 | 1.00 | 13.32 | A | O |
| ATOM | 1040 | N | HIS | A | 248 | 177.018 | 172.424 | -0.063 | 1.00 | 12.96 | A | N |
| ATOM | 1041 | CA | HIS | A | 248 | 176.867 | 172.853 | -1.435 | 1.00 | 14.92 | A | C |
| ATOM | 1042 | CB | HIS | A | 248 | 177.246 | 171.711 | -2.361 | 1.00 | 14.58 | A | C |
| ATOM | 1043 | CG | HIS | A | 248 | 178.698 | 171.388 | -2.305 | 1.00 | 15.75 | A | C |

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|------|------|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 1044 | CD2 | HIS | A | 248 | 179.651 | 171.777 | -1.427 | 1.00 | 14.69 | A | C |
| ATOM | 1045 | ND1 | HIS | A | 248 | 179.331 | 170.596 | -3.236 | 1.00 | 18.18 | A | N |
| ATOM | 1046 | CE1 | HIS | A | 248 | 180.614 | 170.512 | -2.934 | 1.00 | 15.22 | A | C |
| ATOM | 1047 | NE2 | HIS | A | 248 | 180.832 | 171.220 | -1.840 | 1.00 | 14.77 | A | N |
| ATOM | 1048 | C | HIS | A | 248 | 175.474 | 173.338 | -1.717 | 1.00 | 16.00 | A | C |
| ATOM | 1049 | O | HIS | A | 248 | 175.285 | 174.228 | -2.538 | 1.00 | 16.44 | A | O |
| ATOM | 1050 | N | SER | A | 249 | 174.503 | 172.744 | -1.028 | 1.00 | 14.49 | A | N |
| ATOM | 1051 | CA | SER | A | 249 | 173.125 | 173.148 | -1.197 | 1.00 | 15.32 | A | C |
| ATOM | 1052 | CB | SER | A | 249 | 172.201 | 172.233 | -0.392 | 1.00 | 11.40 | A | C |
| ATOM | 1053 | OG | SER | A | 249 | 172.281 | 172.527 | 0.985 | 1.00 | 16.48 | A | O |
| ATOM | 1054 | C | SER | A | 249 | 173.055 | 174.597 | -0.696 | 1.00 | 16.09 | A | C |
| ATOM | 1055 | O | SER | A | 249 | 172.139 | 175.350 | -1.034 | 1.00 | 18.04 | A | O |
| ATOM | 1056 | N | LYS | A | 250 | 174.031 | 174.988 | 0.118 | 1.00 | 15.99 | A | N |
| ATOM | 1057 | CA | LYS | A | 250 | 174.072 | 176.363 | 0.599 | 1.00 | 15.13 | A | C |
| ATOM | 1058 | CB | LYS | A | 250 | 174.405 | 176.441 | 2.107 | 1.00 | 13.57 | A | C |
| ATOM | 1059 | CG | LYS | A | 250 | 173.350 | 175.850 | 3.040 | 1.00 | 15.19 | A | C |
| ATOM | 1060 | CD | LYS | A | 250 | 171.930 | 176.203 | 2.629 | 1.00 | 19.05 | A | C |
| ATOM | 1061 | CE | LYS | A | 250 | 170.943 | 175.150 | 3.131 | 1.00 | 24.43 | A | C |
| ATOM | 1062 | NZ | LYS | A | 250 | 169.492 | 175.372 | 2.776 | 1.00 | 28.76 | A | N |
| ATOM | 1063 | C | LYS | A | 250 | 175.106 | 177.133 | -0.210 | 1.00 | 11.97 | A | C |
| ATOM | 1064 | O | LYS | A | 250 | 175.375 | 178.286 | 0.057 | 1.00 | 14.99 | A | O |
| ATOM | 1065 | N | ARG | A | 251 | 175.686 | 176.478 | -1.208 | 1.00 | 14.14 | A | N |
| ATOM | 1066 | CA | ARG | A | 251 | 176.690 | 177.099 | -2.079 | 1.00 | 13.45 | A | C |
| ATOM | 1067 | CB | ARG | A | 251 | 176.080 | 178.305 | -2.792 | 1.00 | 14.05 | A | C |
| ATOM | 1068 | CG | ARG | A | 251 | 174.976 | 177.936 | -3.779 | 1.00 | 21.06 | A | C |
| ATOM | 1069 | CD | ARG | A | 251 | 175.441 | 178.112 | -5.227 | 1.00 | 27.95 | A | C |
| ATOM | 1070 | NE | ARG | A | 251 | 175.547 | 176.844 | -5.943 | 1.00 | 31.22 | A | N |
| ATOM | 1071 | CZ | ARG | A | 251 | 176.391 | 176.615 | -6.949 | 1.00 | 31.35 | A | C |
| ATOM | 1072 | NH1 | ARG | A | 251 | 177.214 | 177.570 | -7.368 | 1.00 | 28.63 | A | N |
| ATOM | 1073 | NH2 | ARG | A | 251 | 176.427 | 175.422 | -7.526 | 1.00 | 31.96 | A | N |
| ATOM | 1074 | C | ARG | A | 251 | 177.974 | 177.493 | -1.362 | 1.00 | 12.30 | A | C |
| ATOM | 1075 | O | ARG | A | 251 | 178.618 | 178.472 | -1.703 | 1.00 | 12.69 | A | O |
| ATOM | 1076 | N | VAL | A | 252 | 178.344 | 176.714 | -0.363 | 1.00 | 11.12 | A | N |
| ATOM | 1077 | CA | VAL | A | 252 | 179.569 | 176.971 | 0.368 | 1.00 | 12.45 | A | C |
| ATOM | 1078 | CB | VAL | A | 252 | 179.338 | 176.810 | 1.885 | 1.00 | 12.23 | A | C |
| ATOM | 1079 | CG1 | VAL | A | 252 | 180.651 | 176.509 | 2.587 | 1.00 | 9.08 | A | C |
| ATOM | 1080 | CG2 | VAL | A | 252 | 178.681 | 178.059 | 2.446 | 1.00 | 10.54 | A | C |
| ATOM | 1081 | C | VAL | A | 252 | 180.604 | 175.940 | -0.083 | 1.00 | 15.27 | A | C |
| ATOM | 1082 | O | VAL | A | 252 | 180.267 | 174.774 | -0.265 | 1.00 | 12.78 | A | O |
| ATOM | 1083 | N | ILE | A | 253 | 181.840 | 176.373 | -0.326 | 1.00 | 13.72 | A | N |
| ATOM | 1084 | CA | ILE | A | 253 | 182.872 | 175.419 | -0.680 | 1.00 | 10.89 | A | C |
| ATOM | 1085 | CB | ILE | A | 253 | 183.670 | 175.788 | -1.957 | 1.00 | 11.67 | A | C |
| ATOM | 1086 | CG2 | ILE | A | 253 | 184.426 | 174.535 | -2.441 | 1.00 | 5.83 | A | C |
| ATOM | 1087 | CG1 | ILE | A | 253 | 182.733 | 176.323 | -3.059 | 1.00 | 10.28 | A | C |
| ATOM | 1088 | CD1 | ILE | A | 253 | 183.439 | 176.812 | -4.329 | 1.00 | 3.57 | A | C |
| ATOM | 1089 | C | ILE | A | 253 | 183.831 | 175.453 | 0.498 | 1.00 | 13.01 | A | C |
| ATOM | 1090 | O | ILE | A | 253 | 184.347 | 176.524 | 0.849 | 1.00 | 13.11 | A | O |
| ATOM | 1091 | N | HIS | A | 254 | 184.050 | 174.288 | 1.113 | 1.00 | 13.19 | A | N |
| ATOM | 1092 | CA | HIS | A | 254 | 184.943 | 174.161 | 2.259 | 1.00 | 12.95 | A | C |
| ATOM | 1093 | CB | HIS | A | 254 | 184.868 | 172.745 | 2.843 | 1.00 | 12.70 | A | C |
| ATOM | 1094 | CG | HIS | A | 254 | 185.587 | 172.606 | 4.160 | 1.00 | 12.92 | A | C |
| ATOM | 1095 | CD2 | HIS | A | 254 | 185.206 | 172.914 | 5.423 | 1.00 | 9.91 | A | C |
| ATOM | 1096 | ND1 | HIS | A | 254 | 186.898 | 172.180 | 4.257 | 1.00 | 13.73 | A | N |
| ATOM | 1097 | CE1 | HIS | A | 254 | 187.290 | 172.229 | 5.515 | 1.00 | 10.14 | A | C |
| ATOM | 1098 | NE2 | HIS | A | 254 | 186.282 | 172.671 | 6.243 | 1.00 | 11.29 | A | N |
| ATOM | 1099 | C | HIS | A | 254 | 186.383 | 174.507 | 1.889 | 1.00 | 13.04 | A | C |
| ATOM | 1100 | O | HIS | A | 254 | 186.971 | 175.438 | 2.447 | 1.00 | 14.41 | A | O |
| ATOM | 1101 | N | ARG | A | 255 | 186.935 | 173.743 | 0.953 | 1.00 | 12.07 | A | N |
| ATOM | 1102 | CA | ARG | A | 255 | 188.291 | 173.910 | 0.438 | 1.00 | 12.35 | A | C |
| ATOM | 1103 | CB | ARG | A | 255 | 188.494 | 175.341 | -0.050 | 1.00 | 13.05 | A | C |
| ATOM | 1104 | CG | ARG | A | 255 | 187.553 | 175.664 | -1.200 | 1.00 | 15.96 | A | C |
| ATOM | 1105 | CD | ARG | A | 255 | 187.942 | 176.885 | -1.997 | 1.00 | 11.42 | A | C |
| ATOM | 1106 | NE | ARG | A | 255 | 188.045 | 178.075 | -1.183 | 1.00 | 13.42 | A | N |
| ATOM | 1107 | CZ | ARG | A | 255 | 188.194 | 179.295 | -1.690 | 1.00 | 17.97 | A | C |
| ATOM | 1108 | NH1 | ARG | A | 255 | 188.248 | 179.453 | -3.012 | 1.00 | 12.59 | A | N |
| ATOM | 1109 | NH2 | ARG | A | 255 | 188.308 | 180.348 | -0.880 | 1.00 | 11.08 | A | N |
| ATOM | 1110 | C | ARG | A | 255 | 189.479 | 173.491 | 1.328 | 1.00 | 14.82 | A | C |
| ATOM | 1111 | O | ARG | A | 255 | 190.628 | 173.656 | 0.914 | 1.00 | 16.45 | A | O |
| ATOM | 1112 | N | ASP | A | 256 | 189.237 | 172.959 | 2.528 | 1.00 | 13.90 | A | N |
| ATOM | 1113 | CA | ASP | A | 256 | 190.355 | 172.522 | 3.364 | 1.00 | 14.13 | A | C |

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|------|------|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 1114 | CB | ASP | A | 256 | 190.779 | 173.631 | 4.341 | 1.00 | 15.61 | A | C |
| ATOM | 1115 | CG | ASP | A | 256 | 192.185 | 173.408 | 4.930 | 1.00 | 17.71 | A | C |
| ATOM | 1116 | OD1 | ASP | A | 256 | 193.119 | 172.950 | 4.217 | 1.00 | 18.23 | A | O |
| ATOM | 1117 | OD2 | ASP | A | 256 | 192.364 | 173.712 | 6.130 | 1.00 | 20.01 | A | O |
| ATOM | 1118 | C | ASP | A | 256 | 190.021 | 171.231 | 4.094 | 1.00 | 14.83 | A | C |
| ATOM | 1119 | O | ASP | A | 256 | 190.209 | 171.088 | 5.300 | 1.00 | 17.90 | A | O |
| ATOM | 1120 | N | ILE | A | 257 | 189.522 | 170.285 | 3.321 | 1.00 | 14.83 | A | N |
| ATOM | 1121 | CA | ILE | A | 257 | 189.170 | 168.978 | 3.809 | 1.00 | 15.89 | A | C |
| ATOM | 1122 | CB | ILE | A | 257 | 188.209 | 168.318 | 2.821 | 1.00 | 16.68 | A | C |
| ATOM | 1123 | CG2 | ILE | A | 257 | 188.096 | 166.834 | 3.106 | 1.00 | 18.21 | A | C |
| ATOM | 1124 | CG1 | ILE | A | 257 | 186.851 | 169.010 | 2.909 | 1.00 | 19.11 | A | C |
| ATOM | 1125 | CD1 | ILE | A | 257 | 185.939 | 168.636 | 1.771 | 1.00 | 26.98 | A | C |
| ATOM | 1126 | C | ILE | A | 257 | 190.461 | 168.170 | 3.888 | 1.00 | 16.84 | A | C |
| ATOM | 1127 | O | ILE | A | 257 | 191.180 | 168.019 | 2.890 | 1.00 | 19.23 | A | O |
| ATOM | 1128 | N | LYS | A | 258 | 190.759 | 167.673 | 5.079 | 1.00 | 14.42 | A | N |
| ATOM | 1129 | CA | LYS | A | 258 | 191.948 | 166.861 | 5.321 | 1.00 | 13.61 | A | C |
| ATOM | 1130 | CB | LYS | A | 258 | 193.218 | 167.696 | 5.165 | 1.00 | 11.12 | A | C |
| ATOM | 1131 | CG | LYS | A | 258 | 193.288 | 168.912 | 6.021 | 1.00 | 10.35 | A | C |
| ATOM | 1132 | CD | LYS | A | 258 | 194.685 | 169.397 | 5.941 | 1.00 | 11.98 | A | C |
| ATOM | 1133 | CE | LYS | A | 258 | 194.946 | 170.539 | 6.844 | 1.00 | 10.31 | A | C |
| ATOM | 1134 | NZ | LYS | A | 258 | 196.316 | 171.028 | 6.523 | 1.00 | 13.12 | A | N |
| ATOM | 1135 | C | LYS | A | 258 | 191.828 | 166.275 | 6.728 | 1.00 | 12.82 | A | C |
| ATOM | 1136 | O | LYS | A | 258 | 191.093 | 166.807 | 7.565 | 1.00 | 12.94 | A | O |
| ATOM | 1137 | N | PRO | A | 259 | 192.547 | 165.180 | 7.011 | 1.00 | 13.48 | A | N |
| ATOM | 1138 | CD | PRO | A | 259 | 193.607 | 164.582 | 6.181 | 1.00 | 11.93 | A | C |
| ATOM | 1139 | CA | PRO | A | 259 | 192.487 | 164.525 | 8.329 | 1.00 | 14.07 | A | C |
| ATOM | 1140 | CB | PRO | A | 259 | 193.641 | 163.517 | 8.267 | 1.00 | 14.89 | A | C |
| ATOM | 1141 | CG | PRO | A | 259 | 193.714 | 163.197 | 6.778 | 1.00 | 14.98 | A | C |
| ATOM | 1142 | C | PRO | A | 259 | 192.527 | 165.413 | 9.583 | 1.00 | 15.36 | A | C |
| ATOM | 1143 | O | PRO | A | 259 | 191.773 | 165.171 | 10.520 | 1.00 | 15.88 | A | O |
| ATOM | 1144 | N | GLU | A | 260 | 193.388 | 166.428 | 9.593 | 1.00 | 15.22 | A | N |
| ATOM | 1145 | CA | GLU | A | 260 | 193.516 | 167.340 | 10.734 | 1.00 | 19.96 | A | C |
| ATOM | 1146 | CB | GLU | A | 260 | 194.770 | 168.225 | 10.563 | 1.00 | 22.41 | A | C |
| ATOM | 1147 | CG | GLU | A | 260 | 196.090 | 167.457 | 10.516 | 1.00 | 29.11 | A | C |
| ATOM | 1148 | CD | GLU | A | 260 | 196.610 | 167.140 | 9.092 | 1.00 | 32.88 | A | C |
| ATOM | 1149 | OE1 | GLU | A | 260 | 195.826 | 166.656 | 8.235 | 1.00 | 33.12 | A | O |
| ATOM | 1150 | OE2 | GLU | A | 260 | 197.823 | 167.360 | 8.841 | 1.00 | 35.49 | A | O |
| ATOM | 1151 | C | GLU | A | 260 | 192.280 | 168.252 | 10.924 | 1.00 | 18.80 | A | C |
| ATOM | 1152 | O | GLU | A | 260 | 192.140 | 168.905 | 11.957 | 1.00 | 18.71 | A | O |
| ATOM | 1153 | N | ASN | A | 261 | 191.401 | 168.309 | 9.922 | 1.00 | 16.14 | A | N |
| ATOM | 1154 | CA | ASN | A | 261 | 190.206 | 169.139 | 10.014 | 1.00 | 14.12 | A | C |
| ATOM | 1155 | CB | ASN | A | 261 | 190.084 | 170.036 | 8.799 | 1.00 | 12.74 | A | C |
| ATOM | 1156 | CG | ASN | A | 261 | 191.068 | 171.176 | 8.824 | 1.00 | 12.37 | A | C |
| ATOM | 1157 | OD1 | ASN | A | 261 | 191.719 | 171.446 | 9.840 | 1.00 | 11.65 | A | O |
| ATOM | 1158 | ND2 | ASN | A | 261 | 191.178 | 171.868 | 7.705 | 1.00 | 11.18 | A | N |
| ATOM | 1159 | C | ASN | A | 261 | 188.944 | 168.329 | 10.159 | 1.00 | 14.87 | A | C |
| ATOM | 1160 | O | ASN | A | 261 | 187.844 | 168.855 | 10.027 | 1.00 | 14.12 | A | O |
| ATOM | 1161 | N | LEU | A | 262 | 189.117 | 167.037 | 10.428 | 1.00 | 16.20 | A | N |
| ATOM | 1162 | CA | LEU | A | 262 | 187.996 | 166.127 | 10.596 | 1.00 | 13.58 | A | C |
| ATOM | 1163 | CB | LEU | A | 262 | 188.128 | 164.954 | 9.627 | 1.00 | 13.22 | A | C |
| ATOM | 1164 | CG | LEU | A | 262 | 188.164 | 165.406 | 8.162 | 1.00 | 15.01 | A | C |
| ATOM | 1165 | CD1 | LEU | A | 262 | 188.502 | 164.230 | 7.232 | 1.00 | 8.10 | A | C |
| ATOM | 1166 | CD2 | LEU | A | 262 | 186.807 | 166.049 | 7.834 | 1.00 | 10.56 | A | C |
| ATOM | 1167 | C | LEU | A | 262 | 188.027 | 165.633 | 12.031 | 1.00 | 15.43 | A | C |
| ATOM | 1168 | O | LEU | A | 262 | 188.999 | 165.008 | 12.459 | 1.00 | 17.59 | A | O |
| ATOM | 1169 | N | LEU | A | 263 | 186.968 | 165.915 | 12.777 | 1.00 | 11.89 | A | N |
| ATOM | 1170 | CA | LEU | A | 263 | 186.926 | 165.505 | 14.154 | 1.00 | 10.46 | A | C |
| ATOM | 1171 | CB | LEU | A | 263 | 186.657 | 166.725 | 15.005 | 1.00 | 13.46 | A | C |
| ATOM | 1172 | CG | LEU | A | 263 | 187.584 | 167.921 | 14.699 | 1.00 | 14.28 | A | C |
| ATOM | 1173 | CD1 | LEU | A | 263 | 187.208 | 169.055 | 15.634 | 1.00 | 15.02 | A | C |
| ATOM | 1174 | CD2 | LEU | A | 263 | 189.050 | 167.563 | 14.865 | 1.00 | 12.28 | A | C |
| ATOM | 1175 | C | LEU | A | 263 | 185.905 | 164.407 | 14.409 | 1.00 | 12.75 | A | C |
| ATOM | 1176 | O | LEU | A | 263 | 185.068 | 164.112 | 13.553 | 1.00 | 13.83 | A | O |
| ATOM | 1177 | N | LEU | A | 264 | 185.989 | 163.780 | 15.576 | 1.00 | 13.44 | A | N |
| ATOM | 1178 | CA | LEU | A | 264 | 185.076 | 162.693 | 15.919 | 1.00 | 15.08 | A | C |
| ATOM | 1179 | CB | LEU | A | 264 | 185.856 | 161.421 | 16.298 | 1.00 | 15.27 | A | C |
| ATOM | 1180 | CG | LEU | A | 264 | 186.808 | 160.821 | 15.263 | 1.00 | 16.94 | A | C |
| ATOM | 1181 | CD1 | LEU | A | 264 | 187.393 | 159.499 | 15.783 | 1.00 | 20.04 | A | C |
| ATOM | 1182 | CD2 | LEU | A | 264 | 186.043 | 160.590 | 13.944 | 1.00 | 16.69 | A | C |
| ATOM | 1183 | C | LEU | A | 264 | 184.190 | 163.103 | 17.078 | 1.00 | 14.83 | A | C |

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|------|------|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 1184 | O | LEU | A | 264 | 184.669 | 163.613 | 18.096 | 1.00 | 13.07 | A | O |
| ATOM | 1185 | N | GLY | A | 265 | 182.890 | 162.881 | 16.907 | 1.00 | 14.85 | A | N |
| ATOM | 1186 | CA | GLY | A | 265 | 181.943 | 163.218 | 17.947 | 1.00 | 15.69 | A | C |
| ATOM | 1187 | C | GLY | A | 265 | 181.844 | 162.127 | 18.999 | 1.00 | 17.48 | A | C |
| ATOM | 1188 | O | GLY | A | 265 | 182.597 | 161.144 | 18.989 | 1.00 | 19.40 | A | O |
| ATOM | 1189 | N | SER | A | 266 | 180.888 | 162.306 | 19.899 | 1.00 | 17.64 | A | N |
| ATOM | 1190 | CA | SER | A | 266 | 180.641 | 161.398 | 21.007 | 1.00 | 18.83 | A | C |
| ATOM | 1191 | CB | SER | A | 266 | 179.417 | 161.895 | 21.766 | 1.00 | 17.49 | A | C |
| ATOM | 1192 | OG | SER | A | 266 | 179.347 | 161.294 | 23.037 | 1.00 | 31.06 | A | O |
| ATOM | 1193 | C | SER | A | 266 | 180.457 | 159.923 | 20.615 | 1.00 | 16.59 | A | C |
| ATOM | 1194 | O | SER | A | 266 | 180.771 | 159.025 | 21.389 | 1.00 | 16.64 | A | O |
| ATOM | 1195 | N | ALA | A | 267 | 179.960 | 159.675 | 19.412 | 1.00 | 15.97 | A | N |
| ATOM | 1196 | CA | ALA | A | 267 | 179.731 | 158.314 | 18.939 | 1.00 | 17.67 | A | C |
| ATOM | 1197 | CB | ALA | A | 267 | 178.288 | 158.163 | 18.456 | 1.00 | 14.65 | A | C |
| ATOM | 1198 | C | ALA | A | 267 | 180.670 | 157.930 | 17.815 | 1.00 | 18.92 | A | C |
| ATOM | 1199 | O | ALA | A | 267 | 180.353 | 157.040 | 17.025 | 1.00 | 21.00 | A | O |
| ATOM | 1200 | N | GLY | A | 268 | 181.812 | 158.604 | 17.716 | 1.00 | 21.24 | A | N |
| ATOM | 1201 | CA | GLY | A | 268 | 182.741 | 158.278 | 16.648 | 1.00 | 22.38 | A | C |
| ATOM | 1202 | C | GLY | A | 268 | 182.289 | 158.773 | 15.282 | 1.00 | 21.15 | A | C |
| ATOM | 1203 | O | GLY | A | 268 | 182.809 | 158.323 | 14.266 | 1.00 | 20.78 | A | O |
| ATOM | 1204 | N | GLU | A | 269 | 181.324 | 159.690 | 15.249 | 1.00 | 19.71 | A | N |
| ATOM | 1205 | CA | GLU | A | 269 | 180.831 | 160.239 | 13.983 | 1.00 | 18.83 | A | C |
| ATOM | 1206 | CB | GLU | A | 269 | 179.386 | 160.746 | 14.107 | 1.00 | 20.11 | A | C |
| ATOM | 1207 | CG | GLU | A | 269 | 179.239 | 162.020 | 14.944 | 1.00 | 27.28 | A | C |
| ATOM | 1208 | CD | GLU | A | 269 | 178.874 | 161.722 | 16.385 | 1.00 | 29.04 | A | C |
| ATOM | 1209 | OE1 | GLU | A | 269 | 179.762 | 161.324 | 17.177 | 1.00 | 30.97 | A | O |
| ATOM | 1210 | OE2 | GLU | A | 269 | 177.677 | 161.868 | 16.711 | 1.00 | 33.63 | A | O |
| ATOM | 1211 | C | GLU | A | 269 | 181.702 | 161.409 | 13.549 | 1.00 | 17.27 | A | C |
| ATOM | 1212 | O | GLU | A | 269 | 182.088 | 162.249 | 14.368 | 1.00 | 15.38 | A | O |
| ATOM | 1213 | N | LEU | A | 270 | 181.994 | 161.461 | 12.253 | 1.00 | 14.97 | A | N |
| ATOM | 1214 | CA | LEU | A | 270 | 182.822 | 162.515 | 11.689 | 1.00 | 15.39 | A | C |
| ATOM | 1215 | CB | LEU | A | 270 | 183.169 | 162.167 | 10.229 | 1.00 | 21.78 | A | C |
| ATOM | 1216 | CG | LEU | A | 270 | 184.100 | 163.071 | 9.408 | 1.00 | 22.18 | A | C |
| ATOM | 1217 | CD1 | LEU | A | 270 | 185.484 | 162.839 | 9.938 | 1.00 | 26.73 | A | C |
| ATOM | 1218 | CD2 | LEU | A | 270 | 184.109 | 162.725 | 7.944 | 1.00 | 27.39 | A | C |
| ATOM | 1219 | C | LEU | A | 270 | 182.129 | 163.876 | 11.722 | 1.00 | 13.13 | A | C |
| ATOM | 1220 | O | LEU | A | 270 | 180.932 | 163.973 | 11.490 | 1.00 | 12.45 | A | O |
| ATOM | 1221 | N | LYS | A | 271 | 182.895 | 164.918 | 12.027 | 1.00 | 13.69 | A | N |
| ATOM | 1222 | CA | LYS | A | 271 | 182.395 | 166.296 | 12.025 | 1.00 | 13.80 | A | C |
| ATOM | 1223 | CB | LYS | A | 271 | 182.201 | 166.814 | 13.450 | 1.00 | 13.22 | A | C |
| ATOM | 1224 | CG | LYS | A | 271 | 180.846 | 166.378 | 14.025 | 1.00 | 16.86 | A | C |
| ATOM | 1225 | CD | LYS | A | 271 | 180.790 | 166.428 | 15.509 | 1.00 | 17.04 | A | C |
| ATOM | 1226 | CE | LYS | A | 271 | 179.494 | 165.823 | 15.967 | 1.00 | 15.79 | A | C |
| ATOM | 1227 | NZ | LYS | A | 271 | 178.379 | 166.692 | 15.545 | 1.00 | 20.81 | A | N |
| ATOM | 1228 | C | LYS | A | 271 | 183.392 | 167.151 | 11.270 | 1.00 | 15.22 | A | C |
| ATOM | 1229 | O | LYS | A | 271 | 184.586 | 167.152 | 11.582 | 1.00 | 16.95 | A | O |
| ATOM | 1230 | N | ILE | A | 272 | 182.919 | 167.842 | 10.238 | 1.00 | 15.55 | A | N |
| ATOM | 1231 | CA | ILE | A | 272 | 183.803 | 168.702 | 9.462 | 1.00 | 15.61 | A | C |
| ATOM | 1232 | CB | ILE | A | 272 | 183.143 | 169.220 | 8.163 | 1.00 | 19.61 | A | C |
| ATOM | 1233 | CG2 | ILE | A | 272 | 184.054 | 170.269 | 7.530 | 1.00 | 18.20 | A | C |
| ATOM | 1234 | CG1 | ILE | A | 272 | 182.850 | 168.069 | 7.203 | 1.00 | 22.81 | A | C |
| ATOM | 1235 | CD1 | ILE | A | 272 | 182.068 | 168.504 | 5.967 | 1.00 | 25.62 | A | C |
| ATOM | 1236 | C | ILE | A | 272 | 184.051 | 169.926 | 10.303 | 1.00 | 13.27 | A | C |
| ATOM | 1237 | O | ILE | A | 272 | 183.136 | 170.422 | 10.945 | 1.00 | 12.04 | A | O |
| ATOM | 1238 | N | ALA | A | 273 | 185.270 | 170.428 | 10.294 | 1.00 | 11.17 | A | N |
| ATOM | 1239 | CA | ALA | A | 273 | 185.568 | 171.623 | 11.069 | 1.00 | 13.73 | A | C |
| ATOM | 1240 | CB | ALA | A | 273 | 186.266 | 171.248 | 12.376 | 1.00 | 10.14 | A | C |
| ATOM | 1241 | C | ALA | A | 273 | 186.472 | 172.498 | 10.225 | 1.00 | 16.38 | A | C |
| ATOM | 1242 | O | ALA | A | 273 | 186.688 | 172.208 | 9.047 | 1.00 | 16.96 | A | O |
| ATOM | 1243 | N | ASP | A | 274 | 186.986 | 173.568 | 10.834 | 1.00 | 17.04 | A | N |
| ATOM | 1244 | CA | ASP | A | 274 | 187.913 | 174.500 | 10.200 | 1.00 | 15.18 | A | C |
| ATOM | 1245 | CB | ASP | A | 274 | 189.288 | 173.805 | 10.074 | 1.00 | 17.02 | A | C |
| ATOM | 1246 | CG | ASP | A | 274 | 190.447 | 174.786 | 9.800 | 1.00 | 19.27 | A | C |
| ATOM | 1247 | OD1 | ASP | A | 274 | 190.190 | 175.999 | 9.635 | 1.00 | 22.45 | A | O |
| ATOM | 1248 | OD2 | ASP | A | 274 | 191.624 | 174.338 | 9.753 | 1.00 | 17.87 | A | O |
| ATOM | 1249 | C | ASP | A | 274 | 187.434 | 175.064 | 8.838 | 1.00 | 16.14 | A | C |
| ATOM | 1250 | O | ASP | A | 274 | 187.846 | 174.604 | 7.776 | 1.00 | 12.68 | A | O |
| ATOM | 1251 | N | PHE | A | 275 | 186.559 | 176.065 | 8.881 | 1.00 | 15.86 | A | N |
| ATOM | 1252 | CA | PHE | A | 275 | 186.074 | 176.688 | 7.666 | 1.00 | 14.12 | A | C |
| ATOM | 1253 | CB | PHE | A | 275 | 184.602 | 177.108 | 7.835 | 1.00 | 13.16 | A | C |

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|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 1254 | CG | PHE | A | 275 | 183.640 | 175.948 | 7.721 | 1.00 | 12.72 | A | C |
| ATOM | 1255 | CD1 | PHE | A | 275 | 183.540 | 174.994 | 8.746 | 1.00 | 11.42 | A | C |
| ATOM | 1256 | CD2 | PHE | A | 275 | 182.936 | 175.727 | 6.535 | 1.00 | 11.44 | A | C |
| ATOM | 1257 | CE1 | PHE | A | 275 | 182.768 | 173.843 | 8.581 | 1.00 | 10.04 | A | C |
| ATOM | 1258 | CE2 | PHE | A | 275 | 182.157 | 174.568 | 6.367 | 1.00 | 12.57 | A | C |
| ATOM | 1259 | CZ | PHE | A | 275 | 182.079 | 173.631 | 7.396 | 1.00 | 11.15 | A | C |
| ATOM | 1260 | C | PHE | A | 275 | 186.966 | 177.868 | 7.289 | 1.00 | 15.87 | A | C |
| ATOM | 1261 | O | PHE | A | 275 | 186.541 | 178.780 | 6.568 | 1.00 | 15.07 | A | O |
| ATOM | 1262 | N | GLY | A | 276 | 188.221 | 177.820 | 7.751 | 1.00 | 15.09 | A | N |
| ATOM | 1263 | CA | GLY | A | 276 | 189.184 | 178.875 | 7.452 | 1.00 | 17.20 | A | C |
| ATOM | 1264 | C | GLY | A | 276 | 189.322 | 179.285 | 5.983 | 1.00 | 16.44 | A | C |
| ATOM | 1265 | O | GLY | A | 276 | 189.368 | 180.482 | 5.665 | 1.00 | 17.13 | A | O |
| ATOM | 1266 | N | TRP | A | 277 | 189.378 | 178.307 | 5.082 | 1.00 | 13.73 | A | N |
| ATOM | 1267 | CA | TRP | A | 277 | 189.514 | 178.596 | 3.664 | 1.00 | 14.40 | A | C |
| ATOM | 1268 | CB | TRP | A | 277 | 190.568 | 177.667 | 3.071 | 1.00 | 20.13 | A | C |
| ATOM | 1269 | CG | TRP | A | 277 | 191.860 | 177.753 | 3.789 | 1.00 | 22.40 | A | C |
| ATOM | 1270 | CD2 | TRP | A | 277 | 192.691 | 178.904 | 3.893 | 1.00 | 23.73 | A | C |
| ATOM | 1271 | CE2 | TRP | A | 277 | 193.788 | 178.558 | 4.701 | 1.00 | 26.05 | A | C |
| ATOM | 1272 | CE3 | TRP | A | 277 | 192.617 | 180.198 | 3.375 | 1.00 | 25.94 | A | C |
| ATOM | 1273 | CD1 | TRP | A | 277 | 192.463 | 176.777 | 4.517 | 1.00 | 23.25 | A | C |
| ATOM | 1274 | NE1 | TRP | A | 277 | 193.625 | 177.250 | 5.074 | 1.00 | 24.53 | A | N |
| ATOM | 1275 | CZ2 | TRP | A | 277 | 194.806 | 179.467 | 5.015 | 1.00 | 27.86 | A | C |
| ATOM | 1276 | CZ3 | TRP | A | 277 | 193.631 | 181.106 | 3.686 | 1.00 | 28.74 | A | C |
| ATOM | 1277 | CH2 | TRP | A | 277 | 194.711 | 180.733 | 4.496 | 1.00 | 26.68 | A | C |
| ATOM | 1278 | C | TRP | A | 277 | 188.202 | 178.467 | 2.888 | 1.00 | 13.46 | A | C |
| ATOM | 1279 | O | TRP | A | 277 | 188.190 | 178.362 | 1.664 | 1.00 | 14.44 | A | O |
| ATOM | 1280 | N | SER | A | 278 | 187.097 | 178.481 | 3.605 | 1.00 | 14.67 | A | N |
| ATOM | 1281 | CA | SER | A | 278 | 185.809 | 178.360 | 2.973 | 1.00 | 16.81 | A | C |
| ATOM | 1282 | CB | SER | A | 278 | 184.785 | 177.937 | 4.009 | 1.00 | 18.65 | A | C |
| ATOM | 1283 | OG | SER | A | 278 | 185.042 | 176.588 | 4.334 | 1.00 | 31.56 | A | O |
| ATOM | 1284 | C | SER | A | 278 | 185.338 | 179.620 | 2.269 | 1.00 | 15.59 | A | C |
| ATOM | 1285 | O | SER | A | 278 | 185.887 | 180.700 | 2.456 | 1.00 | 13.40 | A | O |
| ATOM | 1286 | N | VAL | A | 279 | 184.330 | 179.468 | 1.427 | 1.00 | 12.47 | A | N |
| ATOM | 1287 | CA | VAL | A | 279 | 183.790 | 180.622 | 0.750 | 1.00 | 15.04 | A | C |
| ATOM | 1288 | CB | VAL | A | 279 | 184.631 | 181.010 | -0.524 | 1.00 | 14.76 | A | C |
| ATOM | 1289 | CG1 | VAL | A | 279 | 184.436 | 179.985 | -1.646 | 1.00 | 10.49 | A | C |
| ATOM | 1290 | CG2 | VAL | A | 279 | 184.256 | 182.419 | -0.971 | 1.00 | 9.51 | A | C |
| ATOM | 1291 | C | VAL | A | 279 | 182.347 | 180.399 | 0.352 | 1.00 | 15.66 | A | C |
| ATOM | 1292 | O | VAL | A | 279 | 181.902 | 179.259 | 0.162 | 1.00 | 16.74 | A | O |
| ATOM | 1293 | N | HIS | A | 280 | 181.604 | 181.491 | 0.276 | 1.00 | 14.84 | A | N |
| ATOM | 1294 | CA | HIS | A | 280 | 180.224 | 181.389 | -0.133 | 1.00 | 17.48 | A | C |
| ATOM | 1295 | CB | HIS | A | 280 | 179.332 | 182.330 | 0.694 | 1.00 | 14.36 | A | C |
| ATOM | 1296 | CG | HIS | A | 280 | 177.885 | 182.230 | 0.336 | 1.00 | 16.95 | A | C |
| ATOM | 1297 | CD2 | HIS | A | 280 | 177.154 | 181.176 | -0.102 | 1.00 | 16.10 | A | C |
| ATOM | 1298 | ND1 | HIS | A | 280 | 177.045 | 183.323 | 0.300 | 1.00 | 15.76 | A | N |
| ATOM | 1299 | CE1 | HIS | A | 280 | 175.864 | 182.946 | -0.154 | 1.00 | 17.22 | A | C |
| ATOM | 1300 | NE2 | HIS | A | 280 | 175.903 | 181.648 | -0.407 | 1.00 | 18.56 | A | N |
| ATOM | 1301 | C | HIS | A | 280 | 180.236 | 181.772 | -1.622 | 1.00 | 17.74 | A | C |
| ATOM | 1302 | O | HIS | A | 280 | 180.439 | 182.942 | -1.989 | 1.00 | 16.22 | A | O |
| ATOM | 1303 | N | ALA | A | 281 | 180.048 | 180.773 | -2.480 | 1.00 | 15.79 | A | N |
| ATOM | 1304 | CA | ALA | A | 281 | 180.066 | 180.984 | -3.930 | 1.00 | 17.35 | A | C |
| ATOM | 1305 | CB | ALA | A | 281 | 181.103 | 180.047 | -4.565 | 1.00 | 15.43 | A | C |
| ATOM | 1306 | C | ALA | A | 281 | 178.693 | 180.779 | -4.610 | 1.00 | 18.31 | A | C |
| ATOM | 1307 | O | ALA | A | 281 | 178.489 | 179.809 | -5.311 | 1.00 | 18.09 | A | O |
| ATOM | 1308 | N | PRO | A | 282 | 177.754 | 181.726 | -4.412 | 1.00 | 20.27 | A | N |
| ATOM | 1309 | CD | PRO | A | 282 | 177.983 | 182.946 | -3.597 | 1.00 | 20.44 | A | C |
| ATOM | 1310 | CA | PRO | A | 282 | 176.381 | 181.701 | -4.974 | 1.00 | 21.92 | A | C |
| ATOM | 1311 | CB | PRO | A | 282 | 175.770 | 183.032 | -4.483 | 1.00 | 21.47 | A | C |
| ATOM | 1312 | CG | PRO | A | 282 | 176.575 | 183.413 | -3.327 | 1.00 | 21.85 | A | C |
| ATOM | 1313 | C | PRO | A | 282 | 176.326 | 181.581 | -6.480 | 1.00 | 22.24 | A | C |
| ATOM | 1314 | O | PRO | A | 282 | 175.611 | 180.729 | -6.987 | 1.00 | 24.89 | A | O |
| ATOM | 1315 | N | SER | A | 283 | 177.088 | 182.439 | -7.163 | 1.00 | 24.90 | A | N |
| ATOM | 1316 | CA | SER | A | 283 | 177.131 | 182.464 | -8.629 | 1.00 | 28.30 | A | C |
| ATOM | 1317 | CB | SER | A | 283 | 176.711 | 183.837 | -9.202 | 1.00 | 26.31 | A | C |
| ATOM | 1318 | OG | SER | A | 283 | 175.659 | 184.461 | -8.492 | 1.00 | 30.72 | A | O |
| ATOM | 1319 | C | SER | A | 283 | 178.454 | 182.133 | -9.327 | 1.00 | 27.14 | A | C |
| ATOM | 1320 | O | SER | A | 283 | 178.563 | 181.133 | -10.033 | 1.00 | 31.35 | A | O |
| ATOM | 1321 | N | SER | A | 284 | 179.434 | 183.011 | -9.147 | 1.00 | 25.92 | A | N |
| ATOM | 1322 | CA | SER | A | 284 | 180.749 | 182.937 | -9.789 | 1.00 | 26.41 | A | C |
| ATOM | 1323 | CB | SER | A | 284 | 181.476 | 184.252 | -9.583 | 1.00 | 26.11 | A | C |

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|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 1324 | OG | SER | A | 284 | 180.590 | 185.288 | -9.231 | 1.00 | 32.06 | A | O |
| ATOM | 1325 | C | SER | A | 284 | 181.720 | 181.869 | -9.346 | 1.00 | 24.70 | A | C |
| ATOM | 1326 | O | SER | A | 284 | 181.617 | 181.347 | -8.254 | 1.00 | 26.06 | A | O |
| ATOM | 1327 | N | ARG | A | 285 | 182.717 | 181.636 | -10.192 | 1.00 | 23.60 | A | N |
| ATOM | 1328 | CA | ARG | A | 285 | 183.782 | 180.701 | -9.910 | 1.00 | 25.00 | A | C |
| ATOM | 1329 | CB | ARG | A | 285 | 184.337 | 180.169 | -11.225 | 1.00 | 25.95 | A | C |
| ATOM | 1330 | CG | ARG | A | 285 | 183.367 | 179.201 | -11.935 | 1.00 | 31.00 | A | C |
| ATOM | 1331 | CD | ARG | A | 285 | 184.154 | 178.152 | -12.746 | 1.00 | 38.12 | A | C |
| ATOM | 1332 | NE | ARG | A | 285 | 184.419 | 178.543 | -14.135 | 1.00 | 42.96 | A | N |
| ATOM | 1333 | CZ | ARG | A | 285 | 185.202 | 177.856 | -14.971 | 1.00 | 45.91 | A | C |
| ATOM | 1334 | NH1 | ARG | A | 285 | 185.808 | 176.744 | -14.560 | 1.00 | 46.53 | A | N |
| ATOM | 1335 | NH2 | ARG | A | 285 | 185.364 | 178.267 | -16.225 | 1.00 | 46.52 | A | N |
| ATOM | 1336 | C | ARG | A | 285 | 184.869 | 181.436 | -9.074 | 1.00 | 23.19 | A | C |
| ATOM | 1337 | O | ARG | A | 285 | 184.791 | 182.652 | -8.873 | 1.00 | 23.63 | A | O |
| ATOM | 1338 | N | ARG | A | 286 | 185.871 | 180.720 | -8.578 | 1.00 | 22.25 | A | N |
| ATOM | 1339 | CA | ARG | A | 286 | 186.898 | 181.369 | -7.770 | 1.00 | 18.11 | A | C |
| ATOM | 1340 | CB | ARG | A | 286 | 186.781 | 180.826 | -6.344 | 1.00 | 16.41 | A | C |
| ATOM | 1341 | CG | ARG | A | 286 | 185.467 | 181.252 | -5.671 | 1.00 | 17.03 | A | C |
| ATOM | 1342 | CD | ARG | A | 286 | 185.642 | 182.655 | -5.179 | 1.00 | 16.99 | A | C |
| ATOM | 1343 | NE | ARG | A | 286 | 184.443 | 183.221 | -4.632 | 1.00 | 25.38 | A | N |
| ATOM | 1344 | CZ | ARG | A | 286 | 184.398 | 184.417 | -4.072 | 1.00 | 26.94 | A | C |
| ATOM | 1345 | NH1 | ARG | A | 286 | 185.509 | 185.138 | -3.995 | 1.00 | 28.48 | A | N |
| ATOM | 1346 | NH2 | ARG | A | 286 | 183.244 | 184.894 | -3.605 | 1.00 | 30.62 | A | N |
| ATOM | 1347 | C | ARG | A | 286 | 188.309 | 181.189 | -8.339 | 1.00 | 19.47 | A | C |
| ATOM | 1348 | O | ARG | A | 286 | 188.537 | 180.305 | -9.174 | 1.00 | 17.62 | A | O |
| ATOM | 1349 | N | TPO | A | 287 | 189.226 | 182.041 | -7.916 | 1.00 | 21.77 | A | N |
| ATOM | 1350 | CA | TPO | A | 287 | 190.558 | 181.974 | -8.377 | 1.00 | 21.28 | A | C |
| ATOM | 1351 | CB | TPO | A | 287 | 190.775 | 183.306 | -9.113 | 1.00 | 25.22 | A | C |
| ATOM | 1352 | CG2 | TPO | A | 287 | 189.942 | 183.372 | -10.421 | 1.00 | 22.17 | A | C |
| ATOM | 1353 | OG1 | TPO | A | 287 | 190.484 | 184.557 | -8.448 | 1.00 | 33.29 | A | O |
| ATOM | 1354 | P | TPO | A | 287 | 191.582 | 185.763 | -8.444 | 1.00 | 33.70 | A | P |
| ATOM | 1355 | O1P | TPO | A | 287 | 190.902 | 186.991 | -9.195 | 1.00 | 41.17 | A | O |
| ATOM | 1356 | O2P | TPO | A | 287 | 192.847 | 185.199 | -9.239 | 1.00 | 37.62 | A | O |
| ATOM | 1357 | O3P | TPO | A | 287 | 191.990 | 186.067 | -6.912 | 1.00 | 41.70 | A | O |
| ATOM | 1358 | C | TPO | A | 287 | 191.612 | 181.717 | -7.265 | 1.00 | 16.99 | A | C |
| ATOM | 1359 | O | TPO | A | 287 | 192.886 | 181.536 | -7.600 | 1.00 | 25.86 | A | O |
| ATOM | 1360 | N | TPO | A | 288 | 191.139 | 181.614 | -6.033 | 1.00 | 16.91 | A | N |
| ATOM | 1361 | CA | TPO | A | 288 | 192.066 | 181.441 | -4.938 | 1.00 | 16.31 | A | C |
| ATOM | 1362 | CB | TPO | A | 288 | 191.262 | 181.750 | -3.672 | 1.00 | 18.77 | A | C |
| ATOM | 1363 | CG2 | TPO | A | 288 | 192.190 | 181.949 | -2.512 | 1.00 | 16.50 | A | C |
| ATOM | 1364 | OG1 | TPO | A | 288 | 190.694 | 183.015 | -3.936 | 1.00 | 23.64 | A | O |
| ATOM | 1365 | P | TPO | A | 288 | 189.163 | 183.188 | -3.329 | 1.00 | 18.56 | A | P |
| ATOM | 1366 | O1P | TPO | A | 288 | 189.234 | 182.723 | -1.818 | 1.00 | 19.25 | A | O |
| ATOM | 1367 | O2P | TPO | A | 288 | 188.217 | 182.242 | -4.154 | 1.00 | 24.67 | A | O |
| ATOM | 1368 | O3P | TPO | A | 288 | 188.820 | 184.760 | -3.320 | 1.00 | 24.29 | A | O |
| ATOM | 1369 | C | TPO | A | 288 | 192.828 | 180.109 | -4.873 | 1.00 | 17.62 | A | C |
| ATOM | 1370 | O | TPO | A | 288 | 192.132 | 178.986 | -5.036 | 1.00 | 16.48 | A | O |
| ATOM | 1371 | N | LEU | A | 289 | 194.152 | 180.122 | -4.825 | 1.00 | 19.62 | A | N |
| ATOM | 1372 | CA | LEU | A | 289 | 194.793 | 178.875 | -4.419 | 1.00 | 20.29 | A | C |
| ATOM | 1373 | CB | LEU | A | 289 | 196.229 | 178.759 | -4.993 | 1.00 | 21.71 | A | C |
| ATOM | 1374 | CG | LEU | A | 289 | 196.977 | 177.458 | -4.598 | 1.00 | 25.59 | A | C |
| ATOM | 1375 | CD1 | LEU | A | 289 | 196.506 | 176.298 | -5.488 | 1.00 | 30.17 | A | C |
| ATOM | 1376 | CD2 | LEU | A | 289 | 198.475 | 177.596 | -4.769 | 1.00 | 26.69 | A | C |
| ATOM | 1377 | C | LEU | A | 289 | 194.833 | 178.800 | -2.900 | 1.00 | 17.60 | A | C |
| ATOM | 1378 | O | LEU | A | 289 | 195.428 | 179.646 | -2.272 | 1.00 | 20.61 | A | O |
| ATOM | 1379 | N | CYS | A | 290 | 194.191 | 177.810 | -2.307 | 1.00 | 16.97 | A | N |
| ATOM | 1380 | CA | CYS | A | 290 | 194.204 | 177.679 | -0.844 | 1.00 | 18.91 | A | C |
| ATOM | 1381 | CB | CYS | A | 290 | 193.102 | 178.535 | -0.201 | 1.00 | 16.86 | A | C |
| ATOM | 1382 | SG | CYS | A | 290 | 191.434 | 178.234 | -0.820 | 1.00 | 22.10 | A | S |
| ATOM | 1383 | C | CYS | A | 290 | 194.003 | 176.211 | -0.453 | 1.00 | 17.81 | A | C |
| ATOM | 1384 | O | CYS | A | 290 | 193.554 | 175.403 | -1.266 | 1.00 | 15.28 | A | O |
| ATOM | 1385 | N | GLY | A | 291 | 194.340 | 175.862 | 0.786 | 1.00 | 19.11 | A | N |
| ATOM | 1386 | CA | GLY | A | 291 | 194.203 | 174.484 | 1.227 | 1.00 | 18.98 | A | C |
| ATOM | 1387 | C | GLY | A | 291 | 195.536 | 173.896 | 1.644 | 1.00 | 19.71 | A | C |
| ATOM | 1388 | O | GLY | A | 291 | 196.458 | 174.606 | 2.047 | 1.00 | 21.01 | A | O |
| ATOM | 1389 | N | THR | A | 292 | 195.626 | 172.584 | 1.523 | 1.00 | 18.60 | A | N |
| ATOM | 1390 | CA | THR | A | 292 | 196.800 | 171.837 | 1.903 | 1.00 | 16.87 | A | C |
| ATOM | 1391 | CB | THR | A | 292 | 196.378 | 170.657 | 2.760 | 1.00 | 19.75 | A | C |
| ATOM | 1392 | OG1 | THR | A | 292 | 195.457 | 171.126 | 3.752 | 1.00 | 25.57 | A | O |
| ATOM | 1393 | CG2 | THR | A | 292 | 197.563 | 169.991 | 3.407 | 1.00 | 18.64 | A | C |

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|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 1394 | C | THR | A | 292 | 197.453 | 171.308 | 0.652 | 1.00 | 17.38 | A | C |
| ATOM | 1395 | O | THR | A | 292 | 196.772 | 170.864 | -0.269 | 1.00 | 16.20 | A | O |
| ATOM | 1396 | N | LEU | A | 293 | 198.780 | 171.347 | 0.631 | 1.00 | 18.38 | A | N |
| ATOM | 1397 | CA | LEU | A | 293 | 199.545 | 170.868 | -0.511 | 1.00 | 18.67 | A | C |
| ATOM | 1398 | CB | LEU | A | 293 | 201.011 | 170.747 | -0.102 | 1.00 | 18.33 | A | C |
| ATOM | 1399 | CG | LEU | A | 293 | 201.947 | 170.217 | -1.188 | 1.00 | 19.70 | A | C |
| ATOM | 1400 | CD1 | LEU | A | 293 | 201.997 | 171.229 | -2.316 | 1.00 | 20.14 | A | C |
| ATOM | 1401 | CD2 | LEU | A | 293 | 203.332 | 169.962 | -0.603 | 1.00 | 18.52 | A | C |
| ATOM | 1402 | C | LEU | A | 293 | 199.063 | 169.533 | -1.126 | 1.00 | 19.06 | A | C |
| ATOM | 1403 | O | LEU | A | 293 | 198.654 | 169.496 | -2.287 | 1.00 | 16.78 | A | O |
| ATOM | 1404 | N | ASP | A | 294 | 199.106 | 168.447 | -0.355 | 1.00 | 16.52 | A | N |
| ATOM | 1405 | CA | ASP | A | 294 | 198.701 | 167.143 | -0.868 | 1.00 | 15.08 | A | C |
| ATOM | 1406 | CB | ASP | A | 294 | 199.029 | 166.048 | 0.164 | 1.00 | 19.73 | A | C |
| ATOM | 1407 | CG | ASP | A | 294 | 200.527 | 165.669 | 0.175 | 1.00 | 23.92 | A | C |
| ATOM | 1408 | OD1 | ASP | A | 294 | 201.065 | 165.254 | -0.891 | 1.00 | 23.94 | A | O |
| ATOM | 1409 | OD2 | ASP | A | 294 | 201.161 | 165.783 | 1.245 | 1.00 | 24.71 | A | O |
| ATOM | 1410 | C | ASP | A | 294 | 197.239 | 167.026 | -1.309 | 1.00 | 14.50 | A | C |
| ATOM | 1411 | O | ASP | A | 294 | 196.875 | 166.084 | -2.011 | 1.00 | 11.76 | A | O |
| ATOM | 1412 | N | TYR | A | 295 | 196.411 | 167.996 | -0.923 | 1.00 | 13.78 | A | N |
| ATOM | 1413 | CA | TYR | A | 295 | 194.993 | 167.963 | -1.267 | 1.00 | 12.35 | A | C |
| ATOM | 1414 | CB | TYR | A | 295 | 194.156 | 168.157 | -0.001 | 1.00 | 12.74 | A | C |
| ATOM | 1415 | CG | TYR | A | 295 | 194.061 | 166.933 | 0.868 | 1.00 | 16.79 | A | C |
| ATOM | 1416 | CD1 | TYR | A | 295 | 195.179 | 166.449 | 1.561 | 1.00 | 19.00 | A | C |
| ATOM | 1417 | CE1 | TYR | A | 295 | 195.119 | 165.265 | 2.307 | 1.00 | 18.70 | A | C |
| ATOM | 1418 | CD2 | TYR | A | 295 | 192.871 | 166.216 | 0.947 | 1.00 | 16.93 | A | C |
| ATOM | 1419 | CE2 | TYR | A | 295 | 192.792 | 165.035 | 1.682 | 1.00 | 21.69 | A | C |
| ATOM | 1420 | CZ | TYR | A | 295 | 193.916 | 164.559 | 2.357 | 1.00 | 22.19 | A | C |
| ATOM | 1421 | OH | TYR | A | 295 | 193.805 | 163.362 | 3.046 | 1.00 | 26.24 | A | O |
| ATOM | 1422 | C | TYR | A | 295 | 194.542 | 168.963 | -2.336 | 1.00 | 10.66 | A | C |
| ATOM | 1423 | O | TYR | A | 295 | 193.387 | 168.955 | -2.741 | 1.00 | 11.85 | A | O |
| ATOM | 1424 | N | LEU | A | 296 | 195.460 | 169.797 | -2.805 | 1.00 | 10.92 | A | N |
| ATOM | 1425 | CA | LEU | A | 296 | 195.119 | 170.800 | -3.807 | 1.00 | 13.78 | A | C |
| ATOM | 1426 | CB | LEU | A | 296 | 196.328 | 171.679 | -4.144 | 1.00 | 11.44 | A | C |
| ATOM | 1427 | CG | LEU | A | 296 | 196.931 | 172.488 | -2.995 | 1.00 | 15.78 | A | C |
| ATOM | 1428 | CD1 | LEU | A | 296 | 198.287 | 173.081 | -3.411 | 1.00 | 13.74 | A | C |
| ATOM | 1429 | CD2 | LEU | A | 296 | 195.954 | 173.585 | -2.582 | 1.00 | 15.05 | A | C |
| ATOM | 1430 | C | LEU | A | 296 | 194.591 | 170.206 | -5.108 | 1.00 | 14.17 | A | C |
| ATOM | 1431 | O | LEU | A | 296 | 195.144 | 169.255 | -5.648 | 1.00 | 12.20 | A | O |
| ATOM | 1432 | N | PRO | A | 297 | 193.504 | 170.783 | -5.631 | 1.00 | 13.56 | A | N |
| ATOM | 1433 | CD | PRO | A | 297 | 192.676 | 171.841 | -5.015 | 1.00 | 13.83 | A | C |
| ATOM | 1434 | CA | PRO | A | 297 | 192.921 | 170.302 | -6.893 | 1.00 | 12.38 | A | C |
| ATOM | 1435 | CB | PRO | A | 297 | 191.516 | 170.923 | -6.872 | 1.00 | 14.10 | A | C |
| ATOM | 1436 | CG | PRO | A | 297 | 191.744 | 172.233 | -6.155 | 1.00 | 13.16 | A | C |
| ATOM | 1437 | C | PRO | A | 297 | 193.772 | 170.826 | -8.083 | 1.00 | 14.86 | A | C |
| ATOM | 1438 | O | PRO | A | 297 | 194.361 | 171.906 | -7.993 | 1.00 | 14.20 | A | O |
| ATOM | 1439 | N | PRO | A | 298 | 193.830 | 170.080 | -9.213 | 1.00 | 14.90 | A | N |
| ATOM | 1440 | CD | PRO | A | 298 | 193.074 | 168.838 | -9.478 | 1.00 | 13.08 | A | C |
| ATOM | 1441 | CA | PRO | A | 298 | 194.606 | 170.479 | -10.403 | 1.00 | 12.06 | A | C |
| ATOM | 1442 | CB | PRO | A | 298 | 194.228 | 169.428 | -11.450 | 1.00 | 12.23 | A | C |
| ATOM | 1443 | CG | PRO | A | 298 | 193.813 | 168.254 | -10.653 | 1.00 | 11.96 | A | C |
| ATOM | 1444 | C | PRO | A | 298 | 194.250 | 171.874 | -10.894 | 1.00 | 12.75 | A | C |
| ATOM | 1445 | O | PRO | A | 298 | 195.124 | 172.677 | -11.218 | 1.00 | 12.47 | A | O |
| ATOM | 1446 | N | GLU | A | 299 | 192.954 | 172.154 | -10.954 | 1.00 | 12.43 | A | N |
| ATOM | 1447 | CA | GLU | A | 299 | 192.495 | 173.447 | -11.427 | 1.00 | 15.93 | A | C |
| ATOM | 1448 | CB | GLU | A | 299 | 190.956 | 173.520 | -11.439 | 1.00 | 15.99 | A | C |
| ATOM | 1449 | CG | GLU | A | 299 | 190.283 | 173.211 | -10.098 | 1.00 | 20.28 | A | C |
| ATOM | 1450 | CD | GLU | A | 299 | 189.893 | 171.729 | -9.951 | 1.00 | 22.71 | A | C |
| ATOM | 1451 | OE1 | GLU | A | 299 | 190.741 | 170.854 | -10.262 | 1.00 | 22.72 | A | O |
| ATOM | 1452 | OE2 | GLU | A | 299 | 188.743 | 171.450 | -9.525 | 1.00 | 19.63 | A | O |
| ATOM | 1453 | C | GLU | A | 299 | 193.068 | 174.609 | -10.615 | 1.00 | 17.99 | A | C |
| ATOM | 1454 | O | GLU | A | 299 | 193.217 | 175.706 | -11.147 | 1.00 | 21.24 | A | O |
| ATOM | 1455 | N | MET | A | 300 | 193.385 | 174.401 | -9.340 | 1.00 | 17.80 | A | N |
| ATOM | 1456 | CA | MET | A | 300 | 193.949 | 175.497 | -8.541 | 1.00 | 21.17 | A | C |
| ATOM | 1457 | CB | MET | A | 300 | 193.781 | 175.248 | -7.031 | 1.00 | 21.87 | A | C |
| ATOM | 1458 | CG | MET | A | 300 | 192.562 | 175.935 | -6.417 | 1.00 | 24.58 | A | C |
| ATOM | 1459 | SD | MET | A | 300 | 192.223 | 175.516 | -4.665 | 1.00 | 23.96 | A | S |
| ATOM | 1460 | CE | MET | A | 300 | 193.835 | 175.427 | -4.097 | 1.00 | 25.92 | A | C |
| ATOM | 1461 | C | MET | A | 300 | 195.429 | 175.697 | -8.845 | 1.00 | 22.52 | A | C |
| ATOM | 1462 | O | MET | A | 300 | 195.900 | 176.818 | -9.034 | 1.00 | 17.97 | A | O |
| ATOM | 1463 | N | ILE | A | 301 | 196.153 | 174.592 | -8.905 | 1.00 | 25.70 | A | N |

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|------|------|-----|-----------|---------|---------|---------|------|-------|---|---|
| ATOM | 1464 | CA | ILE A 301 | 197.573 | 174.627 | -9.160 | 1.00 | 28.05 | A | C |
| ATOM | 1465 | CB | ILE A 301 | 198.162 | 173.192 | -9.173 | 1.00 | 31.23 | A | C |
| ATOM | 1466 | CG2 | ILE A 301 | 199.640 | 173.228 | -9.502 | 1.00 | 33.00 | A | C |
| ATOM | 1467 | CG1 | ILE A 301 | 197.977 | 172.525 | -7.813 | 1.00 | 34.03 | A | C |
| ATOM | 1468 | CD1 | ILE A 301 | 198.227 | 171.019 | -7.871 | 1.00 | 39.59 | A | C |
| ATOM | 1469 | C | ILE A 301 | 197.857 | 175.289 | -10.501 | 1.00 | 28.39 | A | C |
| ATOM | 1470 | O | ILE A 301 | 198.736 | 176.140 | -10.608 | 1.00 | 28.70 | A | O |
| ATOM | 1471 | N | GLU A 302 | 197.091 | 174.902 | -11.513 | 1.00 | 29.15 | A | N |
| ATOM | 1472 | CA | GLU A 302 | 197.260 | 175.411 | -12.864 | 1.00 | 27.63 | A | C |
| ATOM | 1473 | CB | GLU A 302 | 196.614 | 174.449 | -13.847 | 1.00 | 28.51 | A | C |
| ATOM | 1474 | CG | GLU A 302 | 197.309 | 173.128 | -13.932 | 1.00 | 31.90 | A | C |
| ATOM | 1475 | CD | GLU A 302 | 196.442 | 172.074 | -14.604 | 1.00 | 34.88 | A | C |
| ATOM | 1476 | OE1 | GLU A 302 | 195.546 | 172.441 | -15.420 | 1.00 | 35.44 | A | O |
| ATOM | 1477 | OE2 | GLU A 302 | 196.663 | 170.878 | -14.322 | 1.00 | 33.88 | A | O |
| ATOM | 1478 | C | GLU A 302 | 196.759 | 176.817 | -13.160 | 1.00 | 26.56 | A | C |
| ATOM | 1479 | O | GLU A 302 | 196.730 | 177.216 | -14.323 | 1.00 | 25.45 | A | O |
| ATOM | 1480 | N | GLY A 303 | 196.351 | 177.553 | -12.130 | 1.00 | 26.68 | A | N |
| ATOM | 1481 | CA | GLY A 303 | 195.891 | 178.915 | -12.333 | 1.00 | 24.63 | A | C |
| ATOM | 1482 | C | GLY A 303 | 194.576 | 179.072 | -13.077 | 1.00 | 26.17 | A | C |
| ATOM | 1483 | O | GLY A 303 | 194.333 | 180.080 | -13.739 | 1.00 | 25.60 | A | O |
| ATOM | 1484 | N | ARG A 304 | 193.718 | 178.068 | -12.976 | 1.00 | 27.24 | A | N |
| ATOM | 1485 | CA | ARG A 304 | 192.409 | 178.095 | -13.617 | 1.00 | 26.83 | A | C |
| ATOM | 1486 | CB | ARG A 304 | 192.068 | 176.721 | -14.229 | 1.00 | 26.35 | A | C |
| ATOM | 1487 | CG | ARG A 304 | 192.726 | 176.410 | -15.584 | 1.00 | 35.40 | A | C |
| ATOM | 1488 | CD | ARG A 304 | 191.737 | 176.691 | -16.749 | 1.00 | 43.36 | A | C |
| ATOM | 1489 | NE | ARG A 304 | 192.316 | 176.665 | -18.095 | 1.00 | 47.14 | A | N |
| ATOM | 1490 | CZ | ARG A 304 | 191.602 | 176.827 | -19.210 | 1.00 | 51.59 | A | C |
| ATOM | 1491 | NH1 | ARG A 304 | 190.290 | 177.025 | -19.121 | 1.00 | 54.10 | A | N |
| ATOM | 1492 | NH2 | ARG A 304 | 192.189 | 176.794 | -20.413 | 1.00 | 53.71 | A | N |
| ATOM | 1493 | C | ARG A 304 | 191.386 | 178.429 | -12.536 | 1.00 | 27.81 | A | C |
| ATOM | 1494 | O | ARG A 304 | 191.684 | 178.391 | -11.326 | 1.00 | 29.71 | A | O |
| ATOM | 1495 | N | MET A 305 | 190.178 | 178.746 | -12.969 | 1.00 | 25.68 | A | N |
| ATOM | 1496 | CA | MET A 305 | 189.112 | 179.048 | -12.038 | 1.00 | 26.17 | A | C |
| ATOM | 1497 | CB | MET A 305 | 188.027 | 179.807 | -12.757 | 1.00 | 30.29 | A | C |
| ATOM | 1498 | CG | MET A 305 | 188.517 | 181.155 | -13.154 | 1.00 | 35.60 | A | C |
| ATOM | 1499 | SD | MET A 305 | 187.192 | 182.156 | -13.740 | 1.00 | 46.48 | A | S |
| ATOM | 1500 | CE | MET A 305 | 187.949 | 182.896 | -15.291 | 1.00 | 45.95 | A | C |
| ATOM | 1501 | C | MET A 305 | 188.544 | 177.772 | -11.466 | 1.00 | 23.39 | A | C |
| ATOM | 1502 | O | MET A 305 | 188.653 | 176.721 | -12.082 | 1.00 | 23.54 | A | O |
| ATOM | 1503 | N | HIS A 306 | 187.934 | 177.852 | -10.290 | 1.00 | 21.16 | A | N |
| ATOM | 1504 | CA | HIS A 306 | 187.363 | 176.655 | -9.703 | 1.00 | 17.32 | A | C |
| ATOM | 1505 | CB | HIS A 306 | 188.312 | 176.035 | -8.671 | 1.00 | 15.79 | A | C |
| ATOM | 1506 | CG | HIS A 306 | 188.498 | 176.853 | -7.431 | 1.00 | 14.36 | A | C |
| ATOM | 1507 | CD2 | HIS A 306 | 187.895 | 176.788 | -6.218 | 1.00 | 12.29 | A | C |
| ATOM | 1508 | ND1 | HIS A 306 | 189.411 | 177.880 | -7.347 | 1.00 | 15.91 | A | N |
| ATOM | 1509 | CE1 | HIS A 306 | 189.366 | 178.411 | -6.139 | 1.00 | 13.45 | A | C |
| ATOM | 1510 | NE2 | HIS A 306 | 188.453 | 177.767 | -5.434 | 1.00 | 10.38 | A | N |
| ATOM | 1511 | C | HIS A 306 | 186.000 | 176.913 | -9.078 | 1.00 | 18.65 | A | C |
| ATOM | 1512 | O | HIS A 306 | 185.528 | 178.063 | -9.040 | 1.00 | 15.46 | A | O |
| ATOM | 1513 | N | ASP A 307 | 185.376 | 175.822 | -8.622 | 1.00 | 18.40 | A | N |
| ATOM | 1514 | CA | ASP A 307 | 184.057 | 175.824 | -7.986 | 1.00 | 20.30 | A | C |
| ATOM | 1515 | CB | ASP A 307 | 182.969 | 175.631 | -9.035 | 1.00 | 24.34 | A | C |
| ATOM | 1516 | CG | ASP A 307 | 183.174 | 174.374 | -9.865 | 1.00 | 30.83 | A | C |
| ATOM | 1517 | OD1 | ASP A 307 | 183.553 | 173.321 | -9.286 | 1.00 | 33.25 | A | O |
| ATOM | 1518 | OD2 | ASP A 307 | 182.949 | 174.430 | -11.098 | 1.00 | 33.88 | A | O |
| ATOM | 1519 | C | ASP A 307 | 183.948 | 174.721 | -6.917 | 1.00 | 19.00 | A | C |
| ATOM | 1520 | O | ASP A 307 | 184.973 | 174.176 | -6.486 | 1.00 | 21.60 | A | O |
| ATOM | 1521 | N | GLU A 308 | 182.720 | 174.368 | -6.519 | 1.00 | 18.46 | A | N |
| ATOM | 1522 | CA | GLU A 308 | 182.507 | 173.358 | -5.479 | 1.00 | 17.19 | A | C |
| ATOM | 1523 | CB | GLU A 308 | 181.014 | 173.257 | -5.075 | 1.00 | 19.78 | A | C |
| ATOM | 1524 | CG | GLU A 308 | 180.067 | 172.849 | -6.190 | 1.00 | 29.00 | A | C |
| ATOM | 1525 | CD | GLU A 308 | 178.600 | 172.827 | -5.777 | 1.00 | 33.58 | A | C |
| ATOM | 1526 | OE1 | GLU A 308 | 178.121 | 173.800 | -5.139 | 1.00 | 38.06 | A | O |
| ATOM | 1527 | OE2 | GLU A 308 | 177.910 | 171.836 | -6.115 | 1.00 | 41.55 | A | O |
| ATOM | 1528 | C | GLU A 308 | 183.048 | 171.977 | -5.820 | 1.00 | 14.99 | A | C |
| ATOM | 1529 | O | GLU A 308 | 183.135 | 171.106 | -4.946 | 1.00 | 14.14 | A | O |
| ATOM | 1530 | N | LYS A 309 | 183.452 | 171.780 | -7.066 | 1.00 | 12.83 | A | N |
| ATOM | 1531 | CA | LYS A 309 | 183.997 | 170.488 | -7.449 | 1.00 | 16.26 | A | C |
| ATOM | 1532 | CB | LYS A 309 | 184.061 | 170.376 | -8.972 | 1.00 | 18.82 | A | C |
| ATOM | 1533 | CG | LYS A 309 | 182.731 | 170.086 | -9.593 | 1.00 | 21.29 | A | C |

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|------|------|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 1534 | CD | LYS | A | 309 | 182.215 | 168.769 | -9.041 | 1.00 | 29.52 | A | C |
| ATOM | 1535 | CE | LYS | A | 309 | 181.020 | 168.263 | -9.842 | 1.00 | 30.17 | A | C |
| ATOM | 1536 | NZ | LYS | A | 309 | 180.649 | 166.912 | -9.358 | 1.00 | 35.57 | A | N |
| ATOM | 1537 | C | LYS | A | 309 | 185.370 | 170.202 | -6.826 | 1.00 | 16.49 | A | C |
| ATOM | 1538 | O | LYS | A | 309 | 185.816 | 169.051 | -6.804 | 1.00 | 15.73 | A | O |
| ATOM | 1539 | N | VAL | A | 310 | 186.025 | 171.233 | -6.291 | 1.00 | 15.44 | A | N |
| ATOM | 1540 | CA | VAL | A | 310 | 187.319 | 171.020 | -5.662 | 1.00 | 13.90 | A | C |
| ATOM | 1541 | CB | VAL | A | 310 | 188.051 | 172.358 | -5.281 | 1.00 | 15.52 | A | C |
| ATOM | 1542 | CG1 | VAL | A | 310 | 188.197 | 173.247 | -6.503 | 1.00 | 7.36 | A | C |
| ATOM | 1543 | CG2 | VAL | A | 310 | 187.332 | 173.065 | -4.151 | 1.00 | 12.70 | A | C |
| ATOM | 1544 | C | VAL | A | 310 | 187.132 | 170.159 | -4.410 | 1.00 | 17.23 | A | C |
| ATOM | 1545 | O | VAL | A | 310 | 188.008 | 169.357 | -4.083 | 1.00 | 19.39 | A | O |
| ATOM | 1546 | N | ASP | A | 311 | 186.013 | 170.306 | -3.700 | 1.00 | 14.90 | A | N |
| ATOM | 1547 | CA | ASP | A | 311 | 185.804 | 169.452 | -2.541 | 1.00 | 14.20 | A | C |
| ATOM | 1548 | CB | ASP | A | 311 | 184.574 | 169.876 | -1.727 | 1.00 | 16.81 | A | C |
| ATOM | 1549 | CG | ASP | A | 311 | 184.778 | 171.192 | -0.974 | 1.00 | 16.28 | A | C |
| ATOM | 1550 | OD1 | ASP | A | 311 | 185.950 | 171.565 | -0.731 | 1.00 | 12.12 | A | O |
| ATOM | 1551 | OD2 | ASP | A | 311 | 183.756 | 171.832 | -0.617 | 1.00 | 13.33 | A | O |
| ATOM | 1552 | C | ASP | A | 311 | 185.640 | 167.983 | -2.979 | 1.00 | 14.98 | A | C |
| ATOM | 1553 | O | ASP | A | 311 | 185.953 | 167.090 | -2.202 | 1.00 | 16.71 | A | O |
| ATOM | 1554 | N | LEU | A | 312 | 185.162 | 167.723 | -4.205 | 1.00 | 13.32 | A | N |
| ATOM | 1555 | CA | LEU | A | 312 | 185.019 | 166.342 | -4.703 | 1.00 | 13.83 | A | C |
| ATOM | 1556 | CB | LEU | A | 312 | 184.238 | 166.279 | -6.028 | 1.00 | 12.75 | A | C |
| ATOM | 1557 | CG | LEU | A | 312 | 182.708 | 166.216 | -6.008 | 1.00 | 16.02 | A | C |
| ATOM | 1558 | CD1 | LEU | A | 312 | 182.269 | 164.959 | -5.273 | 1.00 | 14.12 | A | C |
| ATOM | 1559 | CD2 | LEU | A | 312 | 182.118 | 167.482 | -5.336 | 1.00 | 16.09 | A | C |
| ATOM | 1560 | C | LEU | A | 312 | 186.399 | 165.749 | -4.951 | 1.00 | 13.94 | A | C |
| ATOM | 1561 | O | LEU | A | 312 | 186.616 | 164.546 | -4.837 | 1.00 | 15.77 | A | O |
| ATOM | 1562 | N | TRP | A | 313 | 187.338 | 166.594 | -5.329 | 1.00 | 15.19 | A | N |
| ATOM | 1563 | CA | TRP | A | 313 | 188.673 | 166.093 | -5.553 | 1.00 | 13.67 | A | C |
| ATOM | 1564 | CB | TRP | A | 313 | 189.505 | 167.131 | -6.287 | 1.00 | 10.13 | A | C |
| ATOM | 1565 | CG | TRP | A | 313 | 190.948 | 166.889 | -6.208 | 1.00 | 9.91 | A | C |
| ATOM | 1566 | CD2 | TRP | A | 313 | 191.775 | 166.296 | -7.214 | 1.00 | 11.32 | A | C |
| ATOM | 1567 | CE2 | TRP | A | 313 | 193.109 | 166.370 | -6.750 | 1.00 | 10.99 | A | C |
| ATOM | 1568 | CE3 | TRP | A | 313 | 191.523 | 165.729 | -8.471 | 1.00 | 8.98 | A | C |
| ATOM | 1569 | CD1 | TRP | A | 313 | 191.784 | 167.266 | -5.199 | 1.00 | 10.59 | A | C |
| ATOM | 1570 | NE1 | TRP | A | 313 | 193.083 | 166.960 | -5.513 | 1.00 | 9.03 | A | N |
| ATOM | 1571 | CZ2 | TRP | A | 313 | 194.190 | 165.890 | -7.494 | 1.00 | 10.17 | A | C |
| ATOM | 1572 | CZ3 | TRP | A | 313 | 192.598 | 165.254 | -9.214 | 1.00 | 13.43 | A | C |
| ATOM | 1573 | CH2 | TRP | A | 313 | 193.923 | 165.344 | -8.723 | 1.00 | 12.05 | A | C |
| ATOM | 1574 | C | TRP | A | 313 | 189.258 | 165.776 | -4.183 | 1.00 | 12.20 | A | C |
| ATOM | 1575 | O | TRP | A | 313 | 189.803 | 164.704 | -3.983 | 1.00 | 11.38 | A | O |
| ATOM | 1576 | N | SER | A | 314 | 189.111 | 166.700 | -3.236 | 1.00 | 13.68 | A | N |
| ATOM | 1577 | CA | SER | A | 314 | 189.636 | 166.492 | -1.893 | 1.00 | 16.07 | A | C |
| ATOM | 1578 | CB | SER | A | 314 | 189.229 | 167.643 | -0.984 | 1.00 | 17.53 | A | C |
| ATOM | 1579 | OG | SER | A | 314 | 190.261 | 168.612 | -0.972 | 1.00 | 25.41 | A | O |
| ATOM | 1580 | C | SER | A | 314 | 189.172 | 165.168 | -1.283 | 1.00 | 16.32 | A | C |
| ATOM | 1581 | O | SER | A | 314 | 189.942 | 164.475 | -0.628 | 1.00 | 15.29 | A | O |
| ATOM | 1582 | N | LEU | A | 315 | 187.907 | 164.838 | -1.517 | 1.00 | 15.55 | A | N |
| ATOM | 1583 | CA | LEU | A | 315 | 187.311 | 163.618 | -1.029 | 1.00 | 15.03 | A | C |
| ATOM | 1584 | CB | LEU | A | 315 | 185.822 | 163.597 | -1.392 | 1.00 | 15.51 | A | C |
| ATOM | 1585 | CG | LEU | A | 315 | 184.951 | 162.599 | -0.624 | 1.00 | 17.84 | A | C |
| ATOM | 1586 | CD1 | LEU | A | 315 | 184.877 | 163.015 | 0.840 | 1.00 | 17.24 | A | C |
| ATOM | 1587 | CD2 | LEU | A | 315 | 183.555 | 162.551 | -1.222 | 1.00 | 15.53 | A | C |
| ATOM | 1588 | C | LEU | A | 315 | 188.031 | 162.402 | -1.626 | 1.00 | 15.76 | A | C |
| ATOM | 1589 | O | LEU | A | 315 | 188.237 | 161.399 | -0.935 | 1.00 | 16.26 | A | O |
| ATOM | 1590 | N | GLY | A | 316 | 188.414 | 162.480 | -2.899 | 1.00 | 13.03 | A | N |
| ATOM | 1591 | CA | GLY | A | 316 | 189.109 | 161.357 | -3.507 | 1.00 | 12.73 | A | C |
| ATOM | 1592 | C | GLY | A | 316 | 190.486 | 161.200 | -2.878 | 1.00 | 13.41 | A | C |
| ATOM | 1593 | O | GLY | A | 316 | 190.933 | 160.092 | -2.576 | 1.00 | 11.78 | A | O |
| ATOM | 1594 | N | VAL | A | 317 | 191.167 | 162.329 | -2.702 | 1.00 | 12.49 | A | N |
| ATOM | 1595 | CA | VAL | A | 317 | 192.481 | 162.351 | -2.089 | 1.00 | 11.35 | A | C |
| ATOM | 1596 | CB | VAL | A | 317 | 193.034 | 163.812 | -1.984 | 1.00 | 11.65 | A | C |
| ATOM | 1597 | CG1 | VAL | A | 317 | 194.231 | 163.859 | -1.079 | 1.00 | 10.54 | A | C |
| ATOM | 1598 | CG2 | VAL | A | 317 | 193.431 | 164.323 | -3.360 | 1.00 | 8.84 | A | C |
| ATOM | 1599 | C | VAL | A | 317 | 192.362 | 161.759 | -0.680 | 1.00 | 12.97 | A | C |
| ATOM | 1600 | O | VAL | A | 317 | 193.152 | 160.887 | -0.280 | 1.00 | 11.80 | A | O |
| ATOM | 1601 | N | LEU | A | 318 | 191.355 | 162.229 | 0.052 | 1.00 | 10.99 | A | N |
| ATOM | 1602 | CA | LEU | A | 318 | 191.097 | 161.785 | 1.408 | 1.00 | 12.40 | A | C |
| ATOM | 1603 | CB | LEU | A | 318 | 189.958 | 162.618 | 2.007 | 1.00 | 15.26 | A | C |

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|------|------|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 1604 | CG | LEU | A | 318 | 189.652 | 162.340 | 3.475 | 1.00 | 15.97 | A | C |
| ATOM | 1605 | CD1 | LEU | A | 318 | 190.731 | 162.990 | 4.377 | 1.00 | 14.54 | A | C |
| ATOM | 1606 | CD2 | LEU | A | 318 | 188.310 | 162.873 | 3.783 | 1.00 | 13.89 | A | C |
| ATOM | 1607 | C | LEU | A | 318 | 190.760 | 160.286 | 1.527 | 1.00 | 12.64 | A | C |
| ATOM | 1608 | O | LEU | A | 318 | 191.232 | 159.610 | 2.437 | 1.00 | 10.92 | A | O |
| ATOM | 1609 | N | CYS | A | 319 | 189.936 | 159.778 | 0.617 | 1.00 | 12.91 | A | N |
| ATOM | 1610 | CA | CYS | A | 319 | 189.547 | 158.372 | 0.623 | 1.00 | 15.63 | A | C |
| ATOM | 1611 | CB | CYS | A | 319 | 188.512 | 158.092 | -0.479 | 1.00 | 20.57 | A | C |
| ATOM | 1612 | SG | CYS | A | 319 | 187.933 | 156.363 | -0.531 | 1.00 | 23.04 | A | S |
| ATOM | 1613 | C | CYS | A | 319 | 190.757 | 157.490 | 0.394 | 1.00 | 15.66 | A | C |
| ATOM | 1614 | O | CYS | A | 319 | 190.906 | 156.439 | 1.025 | 1.00 | 15.68 | A | O |
| ATOM | 1615 | N | TYR | A | 320 | 191.614 | 157.922 | -0.527 | 1.00 | 13.11 | A | N |
| ATOM | 1616 | CA | TYR | A | 320 | 192.833 | 157.194 | -0.827 | 1.00 | 12.42 | A | C |
| ATOM | 1617 | CB | TYR | A | 320 | 193.560 | 157.870 | -1.999 | 1.00 | 12.90 | A | C |
| ATOM | 1618 | CG | TYR | A | 320 | 194.879 | 157.235 | -2.378 | 1.00 | 11.79 | A | C |
| ATOM | 1619 | CD1 | TYR | A | 320 | 196.014 | 157.423 | -1.594 | 1.00 | 11.63 | A | C |
| ATOM | 1620 | CE1 | TYR | A | 320 | 197.213 | 156.803 | -1.906 | 1.00 | 13.39 | A | C |
| ATOM | 1621 | CD2 | TYR | A | 320 | 194.978 | 156.414 | -3.495 | 1.00 | 13.02 | A | C |
| ATOM | 1622 | CE2 | TYR | A | 320 | 196.167 | 155.790 | -3.822 | 1.00 | 14.81 | A | C |
| ATOM | 1623 | CZ | TYR | A | 320 | 197.287 | 155.980 | -3.023 | 1.00 | 16.61 | A | C |
| ATOM | 1624 | OH | TYR | A | 320 | 198.459 | 155.299 | -3.325 | 1.00 | 14.17 | A | O |
| ATOM | 1625 | C | TYR | A | 320 | 193.727 | 157.138 | 0.428 | 1.00 | 13.58 | A | C |
| ATOM | 1626 | O | TYR | A | 320 | 194.217 | 156.062 | 0.797 | 1.00 | 12.75 | A | O |
| ATOM | 1627 | N | GLU | A | 321 | 193.922 | 158.287 | 1.083 | 1.00 | 12.98 | A | N |
| ATOM | 1628 | CA | GLU | A | 321 | 194.752 | 158.359 | 2.289 | 1.00 | 13.87 | A | C |
| ATOM | 1629 | CB | GLU | A | 321 | 194.858 | 159.798 | 2.815 | 1.00 | 15.03 | A | C |
| ATOM | 1630 | CG | GLU | A | 321 | 196.109 | 160.011 | 3.685 | 1.00 | 22.02 | A | C |
| ATOM | 1631 | CD | GLU | A | 321 | 196.204 | 161.394 | 4.326 | 1.00 | 27.52 | A | C |
| ATOM | 1632 | OE1 | GLU | A | 321 | 195.889 | 162.413 | 3.676 | 1.00 | 30.94 | A | O |
| ATOM | 1633 | OE2 | GLU | A | 321 | 196.621 | 161.470 | 5.494 | 1.00 | 31.35 | A | O |
| ATOM | 1634 | C | GLU | A | 321 | 194.218 | 157.470 | 3.416 | 1.00 | 14.01 | A | C |
| ATOM | 1635 | O | GLU | A | 321 | 194.986 | 156.877 | 4.166 | 1.00 | 14.13 | A | O |
| ATOM | 1636 | N | PHE | A | 322 | 192.899 | 157.384 | 3.536 | 1.00 | 13.55 | A | N |
| ATOM | 1637 | CA | PHE | A | 322 | 192.291 | 156.568 | 4.576 | 1.00 | 12.09 | A | C |
| ATOM | 1638 | CB | PHE | A | 322 | 190.765 | 156.710 | 4.570 | 1.00 | 6.70 | A | C |
| ATOM | 1639 | CG | PHE | A | 322 | 190.272 | 157.975 | 5.176 | 1.00 | 6.79 | A | C |
| ATOM | 1640 | CD1 | PHE | A | 322 | 191.144 | 158.836 | 5.838 | 1.00 | 7.89 | A | C |
| ATOM | 1641 | CD2 | PHE | A | 322 | 188.933 | 158.312 | 5.106 | 1.00 | 8.09 | A | C |
| ATOM | 1642 | CE1 | PHE | A | 322 | 190.688 | 160.011 | 6.416 | 1.00 | 6.90 | A | C |
| ATOM | 1643 | CE2 | PHE | A | 322 | 188.464 | 159.497 | 5.689 | 1.00 | 10.00 | A | C |
| ATOM | 1644 | CZ | PHE | A | 322 | 189.346 | 160.340 | 6.345 | 1.00 | 8.24 | A | C |
| ATOM | 1645 | C | PHE | A | 322 | 192.629 | 155.107 | 4.398 | 1.00 | 12.56 | A | C |
| ATOM | 1646 | O | PHE | A | 322 | 192.888 | 154.401 | 5.375 | 1.00 | 14.57 | A | O |
| ATOM | 1647 | N | LEU | A | 323 | 192.629 | 154.663 | 3.147 | 1.00 | 11.23 | A | N |
| ATOM | 1648 | CA | LEU | A | 323 | 192.876 | 153.269 | 2.830 | 1.00 | 10.81 | A | C |
| ATOM | 1649 | CB | LEU | A | 323 | 192.181 | 152.923 | 1.510 | 1.00 | 11.58 | A | C |
| ATOM | 1650 | CG | LEU | A | 323 | 190.650 | 152.911 | 1.467 | 1.00 | 11.82 | A | C |
| ATOM | 1651 | CD1 | LEU | A | 323 | 190.149 | 152.693 | 0.033 | 1.00 | 1.00 | A | C |
| ATOM | 1652 | CD2 | LEU | A | 323 | 190.158 | 151.799 | 2.429 | 1.00 | 8.83 | A | C |
| ATOM | 1653 | C | LEU | A | 323 | 194.341 | 152.888 | 2.725 | 1.00 | 13.31 | A | C |
| ATOM | 1654 | O | LEU | A | 323 | 194.734 | 151.769 | 3.072 | 1.00 | 13.08 | A | O |
| ATOM | 1655 | N | VAL | A | 324 | 195.144 | 153.832 | 2.253 | 1.00 | 13.79 | A | N |
| ATOM | 1656 | CA | VAL | A | 324 | 196.552 | 153.589 | 2.028 | 1.00 | 13.43 | A | C |
| ATOM | 1657 | CB | VAL | A | 324 | 196.958 | 154.241 | 0.703 | 1.00 | 13.53 | A | C |
| ATOM | 1658 | CG1 | VAL | A | 324 | 198.387 | 153.909 | 0.365 | 1.00 | 10.33 | A | C |
| ATOM | 1659 | CG2 | VAL | A | 324 | 196.009 | 153.788 | -0.384 | 1.00 | 10.31 | A | C |
| ATOM | 1660 | C | VAL | A | 324 | 197.439 | 154.085 | 3.153 | 1.00 | 15.36 | A | C |
| ATOM | 1661 | O | VAL | A | 324 | 198.496 | 153.525 | 3.419 | 1.00 | 15.10 | A | O |
| ATOM | 1662 | N | GLY | A | 325 | 197.019 | 155.146 | 3.819 | 1.00 | 16.58 | A | N |
| ATOM | 1663 | CA | GLY | A | 325 | 197.834 | 155.647 | 4.902 | 1.00 | 18.98 | A | C |
| ATOM | 1664 | C | GLY | A | 325 | 198.687 | 156.819 | 4.459 | 1.00 | 22.31 | A | C |
| ATOM | 1665 | O | GLY | A | 325 | 199.484 | 157.330 | 5.245 | 1.00 | 22.91 | A | O |
| ATOM | 1666 | N | LYS | A | 326 | 198.556 | 157.238 | 3.204 | 1.00 | 22.34 | A | N |
| ATOM | 1667 | CA | LYS | A | 326 | 199.299 | 158.399 | 2.743 | 1.00 | 20.73 | A | C |
| ATOM | 1668 | CB | LYS | A | 326 | 200.775 | 158.057 | 2.468 | 1.00 | 22.54 | A | C |
| ATOM | 1669 | CG | LYS | A | 326 | 201.002 | 157.016 | 1.405 | 1.00 | 26.76 | A | C |
| ATOM | 1670 | CD | LYS | A | 326 | 202.478 | 156.728 | 1.181 | 1.00 | 29.37 | A | C |
| ATOM | 1671 | CE | LYS | A | 326 | 202.635 | 155.634 | 0.108 | 1.00 | 36.99 | A | C |
| ATOM | 1672 | NZ | LYS | A | 326 | 204.059 | 155.235 | -0.146 | 1.00 | 40.73 | A | N |
| ATOM | 1673 | C | LYS | A | 326 | 198.627 | 158.927 | 1.496 | 1.00 | 18.10 | A | C |

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|------|------|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 1674 | O | LYS | A | 326 | 198.050 | 158.173 | 0.745 | 1.00 | 18.75 | A | O |
| ATOM | 1675 | N | PRO | A | 327 | 198.657 | 160.254 | 1.290 | 1.00 | 19.06 | A | N |
| ATOM | 1676 | CD | PRO | A | 327 | 199.416 | 161.265 | 2.050 | 1.00 | 18.18 | A | C |
| ATOM | 1677 | CA | PRO | A | 327 | 198.046 | 160.877 | 0.111 | 1.00 | 16.77 | A | C |
| ATOM | 1678 | CB | PRO | A | 327 | 198.349 | 162.358 | 0.331 | 1.00 | 18.27 | A | C |
| ATOM | 1679 | CG | PRO | A | 327 | 199.652 | 162.318 | 0.997 | 1.00 | 17.79 | A | C |
| ATOM | 1680 | C | PRO | A | 327 | 198.719 | 160.334 | -1.156 | 1.00 | 15.47 | A | C |
| ATOM | 1681 | O | PRO | A | 327 | 199.920 | 160.074 | -1.165 | 1.00 | 17.98 | A | O |
| ATOM | 1682 | N | PRO | A | 328 | 197.967 | 160.221 | -2.256 | 1.00 | 15.81 | A | N |
| ATOM | 1683 | CD | PRO | A | 328 | 196.629 | 160.830 | -2.419 | 1.00 | 13.52 | A | C |
| ATOM | 1684 | CA | PRO | A | 328 | 198.467 | 159.699 | -3.540 | 1.00 | 13.75 | A | C |
| ATOM | 1685 | CB | PRO | A | 328 | 197.183 | 159.511 | -4.345 | 1.00 | 15.58 | A | C |
| ATOM | 1686 | CG | PRO | A | 328 | 196.384 | 160.712 | -3.922 | 1.00 | 15.99 | A | C |
| ATOM | 1687 | C | PRO | A | 328 | 199.517 | 160.502 | -4.312 | 1.00 | 14.29 | A | C |
| ATOM | 1688 | O | PRO | A | 328 | 200.226 | 159.947 | -5.150 | 1.00 | 15.51 | A | O |
| ATOM | 1689 | N | PHE | A | 329 | 199.627 | 161.798 | -4.039 | 1.00 | 15.34 | A | N |
| ATOM | 1690 | CA | PHE | A | 329 | 200.600 | 162.627 | -4.758 | 1.00 | 16.02 | A | C |
| ATOM | 1691 | CB | PHE | A | 329 | 199.880 | 163.832 | -5.357 | 1.00 | 11.57 | A | C |
| ATOM | 1692 | CG | PHE | A | 329 | 198.677 | 163.456 | -6.171 | 1.00 | 10.41 | A | C |
| ATOM | 1693 | CD1 | PHE | A | 329 | 198.831 | 162.822 | -7.393 | 1.00 | 7.22 | A | C |
| ATOM | 1694 | CD2 | PHE | A | 329 | 197.389 | 163.646 | -5.672 | 1.00 | 10.88 | A | C |
| ATOM | 1695 | CE1 | PHE | A | 329 | 197.722 | 162.365 | -8.117 | 1.00 | 11.91 | A | C |
| ATOM | 1696 | CE2 | PHE | A | 329 | 196.267 | 163.194 | -6.387 | 1.00 | 9.29 | A | C |
| ATOM | 1697 | CZ | PHE | A | 329 | 196.435 | 162.548 | -7.611 | 1.00 | 11.49 | A | C |
| ATOM | 1698 | C | PHE | A | 329 | 201.774 | 163.073 | -3.896 | 1.00 | 18.50 | A | C |
| ATOM | 1699 | O | PHE | A | 329 | 202.501 | 163.999 | -4.242 | 1.00 | 17.82 | A | O |
| ATOM | 1700 | N | GLU | A | 330 | 201.968 | 162.411 | -2.765 | 1.00 | 20.96 | A | N |
| ATOM | 1701 | CA | GLU | A | 330 | 203.061 | 162.781 | -1.872 | 1.00 | 25.68 | A | C |
| ATOM | 1702 | CB | GLU | A | 330 | 203.042 | 161.868 | -0.653 | 1.00 | 28.63 | A | C |
| ATOM | 1703 | CG | GLU | A | 330 | 203.889 | 162.292 | 0.527 | 1.00 | 35.48 | A | C |
| ATOM | 1704 | CD | GLU | A | 330 | 203.618 | 161.381 | 1.725 | 1.00 | 40.14 | A | C |
| ATOM | 1705 | OE1 | GLU | A | 330 | 203.825 | 161.798 | 2.890 | 1.00 | 43.93 | A | O |
| ATOM | 1706 | OE2 | GLU | A | 330 | 203.186 | 160.230 | 1.490 | 1.00 | 43.19 | A | O |
| ATOM | 1707 | C | GLU | A | 330 | 204.404 | 162.666 | -2.593 | 1.00 | 25.36 | A | C |
| ATOM | 1708 | O | GLU | A | 330 | 204.712 | 161.627 | -3.177 | 1.00 | 25.32 | A | O |
| ATOM | 1709 | N | ALA | A | 331 | 205.195 | 163.733 | -2.551 | 1.00 | 23.31 | A | N |
| ATOM | 1710 | CA | ALA | A | 331 | 206.506 | 163.745 | -3.184 | 1.00 | 23.23 | A | C |
| ATOM | 1711 | CB | ALA | A | 331 | 206.432 | 164.479 | -4.500 | 1.00 | 19.73 | A | C |
| ATOM | 1712 | C | ALA | A | 331 | 207.503 | 164.429 | -2.239 | 1.00 | 24.76 | A | C |
| ATOM | 1713 | O | ALA | A | 331 | 207.109 | 165.040 | -1.249 | 1.00 | 22.52 | A | O |
| ATOM | 1714 | N | ASN | A | 332 | 208.794 | 164.320 | -2.542 | 1.00 | 27.89 | A | N |
| ATOM | 1715 | CA | ASN | A | 332 | 209.822 | 164.922 | -1.692 | 1.00 | 30.47 | A | C |
| ATOM | 1716 | CB | ASN | A | 332 | 211.174 | 164.246 | -1.975 | 1.00 | 32.87 | A | C |
| ATOM | 1717 | CG | ASN | A | 332 | 211.190 | 162.794 | -1.504 | 1.00 | 37.45 | A | C |
| ATOM | 1718 | OD1 | ASN | A | 332 | 210.716 | 162.504 | -0.401 | 1.00 | 36.73 | A | O |
| ATOM | 1719 | ND2 | ASN | A | 332 | 211.729 | 161.883 | -2.321 | 1.00 | 37.38 | A | N |
| ATOM | 1720 | C | ASN | A | 332 | 209.942 | 166.462 | -1.771 | 1.00 | 29.91 | A | C |
| ATOM | 1721 | O | ASN | A | 332 | 210.601 | 167.073 | -0.928 | 1.00 | 29.72 | A | O |
| ATOM | 1722 | N | THR | A | 333 | 209.303 | 167.092 | -2.754 | 1.00 | 27.34 | A | N |
| ATOM | 1723 | CA | THR | A | 333 | 209.369 | 168.544 | -2.881 | 1.00 | 25.63 | A | C |
| ATOM | 1724 | CB | THR | A | 333 | 210.411 | 168.968 | -3.919 | 1.00 | 27.29 | A | C |
| ATOM | 1725 | OG1 | THR | A | 333 | 209.862 | 168.766 | -5.232 | 1.00 | 25.31 | A | O |
| ATOM | 1726 | CG2 | THR | A | 333 | 211.683 | 168.122 | -3.769 | 1.00 | 28.40 | A | C |
| ATOM | 1727 | C | THR | A | 333 | 208.021 | 169.099 | -3.341 | 1.00 | 24.25 | A | C |
| ATOM | 1728 | O | THR | A | 333 | 207.168 | 168.355 | -3.832 | 1.00 | 24.65 | A | O |
| ATOM | 1729 | N | TYR | A | 334 | 207.839 | 170.406 | -3.177 | 1.00 | 22.97 | A | N |
| ATOM | 1730 | CA | TYR | A | 334 | 206.610 | 171.081 | -3.584 | 1.00 | 24.27 | A | C |
| ATOM | 1731 | CB | TYR | A | 334 | 206.670 | 172.557 | -3.243 | 1.00 | 26.40 | A | C |
| ATOM | 1732 | CG | TYR | A | 334 | 206.122 | 172.899 | -1.885 | 1.00 | 28.73 | A | C |
| ATOM | 1733 | CD1 | TYR | A | 334 | 206.846 | 172.639 | -0.725 | 1.00 | 29.53 | A | C |
| ATOM | 1734 | CE1 | TYR | A | 334 | 206.322 | 172.945 | 0.537 | 1.00 | 32.11 | A | C |
| ATOM | 1735 | CD2 | TYR | A | 334 | 204.863 | 173.476 | -1.759 | 1.00 | 28.50 | A | C |
| ATOM | 1736 | CE2 | TYR | A | 334 | 204.329 | 173.794 | -0.497 | 1.00 | 29.43 | A | C |
| ATOM | 1737 | CZ | TYR | A | 334 | 205.072 | 173.518 | 0.645 | 1.00 | 31.88 | A | C |
| ATOM | 1738 | OH | TYR | A | 334 | 204.597 | 173.783 | 1.910 | 1.00 | 34.80 | A | O |
| ATOM | 1739 | C | TYR | A | 334 | 206.379 | 170.979 | -5.088 | 1.00 | 25.01 | A | C |
| ATOM | 1740 | O | TYR | A | 334 | 205.267 | 170.712 | -5.567 | 1.00 | 24.09 | A | O |
| ATOM | 1741 | N | GLN | A | 335 | 207.445 | 171.221 | -5.831 | 1.00 | 24.15 | A | N |
| ATOM | 1742 | CA | GLN | A | 335 | 207.401 | 171.183 | -7.272 | 1.00 | 26.26 | A | C |
| ATOM | 1743 | CB | GLN | A | 335 | 208.763 | 171.616 | -7.820 | 1.00 | 30.16 | A | C |

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| ATOM | 1744 | CG | GLN | A | 335 | 208.690 | 172.407 | -9.123 | 1.00 | 37.20 | A | C |
| ATOM | 1745 | CD | GLN | A | 335 | 209.938 | 173.249 | -9.353 | 1.00 | 44.29 | A | C |
| ATOM | 1746 | OE1 | GLN | A | 335 | 211.075 | 172.716 | -9.361 | 1.00 | 45.86 | A | O |
| ATOM | 1747 | NE2 | GLN | A | 335 | 209.749 | 174.581 | -9.540 | 1.00 | 45.65 | A | N |
| ATOM | 1748 | C | GLN | A | 335 | 207.014 | 169.785 | -7.766 | 1.00 | 24.06 | A | C |
| ATOM | 1749 | O | GLN | A | 335 | 206.182 | 169.643 | -8.661 | 1.00 | 20.60 | A | O |
| ATOM | 1750 | N | GLU | A | 336 | 207.596 | 168.746 | -7.179 | 1.00 | 23.21 | A | N |
| ATOM | 1751 | CA | GLU | A | 336 | 207.243 | 167.407 | -7.624 | 1.00 | 22.61 | A | C |
| ATOM | 1752 | CB | GLU | A | 336 | 208.183 | 166.360 | -7.022 | 1.00 | 19.74 | A | C |
| ATOM | 1753 | CG | GLU | A | 336 | 207.807 | 164.932 | -7.350 | 1.00 | 27.97 | A | C |
| ATOM | 1754 | CD | GLU | A | 336 | 207.852 | 164.603 | -8.845 | 1.00 | 35.28 | A | C |
| ATOM | 1755 | OE1 | GLU | A | 336 | 207.231 | 163.579 | -9.236 | 1.00 | 38.15 | A | O |
| ATOM | 1756 | OE2 | GLU | A | 336 | 208.508 | 165.350 | -9.628 | 1.00 | 39.74 | A | O |
| ATOM | 1757 | C | GLU | A | 336 | 205.775 | 167.056 | -7.327 | 1.00 | 23.14 | A | C |
| ATOM | 1758 | O | GLU | A | 336 | 205.138 | 166.363 | -8.124 | 1.00 | 23.03 | A | O |
| ATOM | 1759 | N | THR | A | 337 | 205.241 | 167.517 | -6.196 | 1.00 | 21.09 | A | N |
| ATOM | 1760 | CA | THR | A | 337 | 203.849 | 167.229 | -5.868 | 1.00 | 21.21 | A | C |
| ATOM | 1761 | CB | THR | A | 337 | 203.541 | 167.589 | -4.380 | 1.00 | 22.66 | A | C |
| ATOM | 1762 | OG1 | THR | A | 337 | 204.334 | 166.744 | -3.537 | 1.00 | 24.71 | A | O |
| ATOM | 1763 | CG2 | THR | A | 337 | 202.072 | 167.366 | -4.030 | 1.00 | 16.15 | A | C |
| ATOM | 1764 | C | THR | A | 337 | 202.918 | 167.944 | -6.855 | 1.00 | 19.71 | A | C |
| ATOM | 1765 | O | THR | A | 337 | 201.978 | 167.329 | -7.346 | 1.00 | 21.88 | A | O |
| ATOM | 1766 | N | TYR | A | 338 | 203.191 | 169.210 | -7.171 | 1.00 | 17.76 | A | N |
| ATOM | 1767 | CA | TYR | A | 338 | 202.404 | 169.982 | -8.151 | 1.00 | 17.94 | A | C |
| ATOM | 1768 | CB | TYR | A | 338 | 203.051 | 171.348 | -8.416 | 1.00 | 19.72 | A | C |
| ATOM | 1769 | CG | TYR | A | 338 | 202.924 | 172.309 | -7.282 | 1.00 | 21.47 | A | C |
| ATOM | 1770 | CD1 | TYR | A | 338 | 203.927 | 173.231 | -7.014 | 1.00 | 26.12 | A | C |
| ATOM | 1771 | CE1 | TYR | A | 338 | 203.780 | 174.172 | -6.003 | 1.00 | 31.99 | A | C |
| ATOM | 1772 | CD2 | TYR | A | 338 | 201.775 | 172.333 | -6.506 | 1.00 | 23.72 | A | C |
| ATOM | 1773 | CE2 | TYR | A | 338 | 201.609 | 173.256 | -5.498 | 1.00 | 28.25 | A | C |
| ATOM | 1774 | CZ | TYR | A | 338 | 202.605 | 174.184 | -5.255 | 1.00 | 32.26 | A | C |
| ATOM | 1775 | OH | TYR | A | 338 | 202.398 | 175.197 | -4.343 | 1.00 | 37.49 | A | O |
| ATOM | 1776 | C | TYR | A | 338 | 202.342 | 169.248 | -9.480 | 1.00 | 17.24 | A | C |
| ATOM | 1777 | O | TYR | A | 338 | 201.303 | 169.202 | -10.143 | 1.00 | 17.93 | A | O |
| ATOM | 1778 | N | LYS | A | 339 | 203.492 | 168.704 | -9.869 | 1.00 | 18.06 | A | N |
| ATOM | 1779 | CA | LYS | A | 339 | 203.635 | 167.967 | -11.112 | 1.00 | 15.13 | A | C |
| ATOM | 1780 | CB | LYS | A | 339 | 205.087 | 167.521 | -11.318 | 1.00 | 15.66 | A | C |
| ATOM | 1781 | CG | LYS | A | 339 | 205.282 | 166.761 | -12.647 | 1.00 | 25.11 | A | C |
| ATOM | 1782 | CD | LYS | A | 339 | 206.675 | 166.164 | -12.838 | 1.00 | 28.61 | A | C |
| ATOM | 1783 | CE | LYS | A | 339 | 207.736 | 167.232 | -12.973 | 1.00 | 30.48 | A | C |
| ATOM | 1784 | NZ | LYS | A | 339 | 209.081 | 166.590 | -13.128 | 1.00 | 37.06 | A | N |
| ATOM | 1785 | C | LYS | A | 339 | 202.734 | 166.747 | -11.110 | 1.00 | 15.66 | A | C |
| ATOM | 1786 | O | LYS | A | 339 | 201.999 | 166.520 | -12.062 | 1.00 | 16.79 | A | O |
| ATOM | 1787 | N | ARG | A | 340 | 202.788 | 165.963 | -10.038 | 1.00 | 14.01 | A | N |
| ATOM | 1788 | CA | ARG | A | 340 | 201.980 | 164.754 | -9.941 | 1.00 | 17.25 | A | C |
| ATOM | 1789 | CB | ARG | A | 340 | 202.444 | 163.917 | -8.749 | 1.00 | 17.92 | A | C |
| ATOM | 1790 | CG | ARG | A | 340 | 203.675 | 163.112 | -9.058 | 1.00 | 20.94 | A | C |
| ATOM | 1791 | CD | ARG | A | 340 | 204.273 | 162.632 | -7.805 | 1.00 | 26.11 | A | C |
| ATOM | 1792 | NE | ARG | A | 340 | 205.579 | 162.024 | -8.000 | 1.00 | 30.74 | A | N |
| ATOM | 1793 | CZ | ARG | A | 340 | 206.247 | 161.430 | -7.014 | 1.00 | 34.14 | A | C |
| ATOM | 1794 | NH1 | ARG | A | 340 | 205.697 | 161.387 | -5.805 | 1.00 | 36.45 | A | N |
| ATOM | 1795 | NH2 | ARG | A | 340 | 207.447 | 160.886 | -7.219 | 1.00 | 32.82 | A | N |
| ATOM | 1796 | C | ARG | A | 340 | 200.467 | 164.980 | -9.876 | 1.00 | 16.32 | A | C |
| ATOM | 1797 | O | ARG | A | 340 | 199.692 | 164.177 | -10.393 | 1.00 | 13.54 | A | O |
| ATOM | 1798 | N | ILE | A | 341 | 200.052 | 166.068 | -9.242 | 1.00 | 16.44 | A | N |
| ATOM | 1799 | CA | ILE | A | 341 | 198.637 | 166.396 | -9.147 | 1.00 | 15.90 | A | C |
| ATOM | 1800 | CB | ILE | A | 341 | 198.425 | 167.544 | -8.133 | 1.00 | 14.61 | A | C |
| ATOM | 1801 | CG2 | ILE | A | 341 | 197.031 | 168.173 | -8.284 | 1.00 | 10.21 | A | C |
| ATOM | 1802 | CG1 | ILE | A | 341 | 198.636 | 166.991 | -6.722 | 1.00 | 9.86 | A | C |
| ATOM | 1803 | CD1 | ILE | A | 341 | 198.865 | 168.066 | -5.710 | 1.00 | 10.30 | A | C |
| ATOM | 1804 | C | ILE | A | 341 | 198.139 | 166.813 | -10.524 | 1.00 | 16.94 | A | C |
| ATOM | 1805 | O | ILE | A | 341 | 197.099 | 166.346 | -11.003 | 1.00 | 15.49 | A | O |
| ATOM | 1806 | N | SER | A | 342 | 198.911 | 167.677 | -11.165 | 1.00 | 17.49 | A | N |
| ATOM | 1807 | CA | SER | A | 342 | 198.556 | 168.185 | -12.479 | 1.00 | 19.50 | A | C |
| ATOM | 1808 | CB | SER | A | 342 | 199.638 | 169.153 | -12.927 | 1.00 | 19.12 | A | C |
| ATOM | 1809 | OG | SER | A | 342 | 199.178 | 169.899 | -14.023 | 1.00 | 28.84 | A | O |
| ATOM | 1810 | C | SER | A | 342 | 198.385 | 167.065 | -13.518 | 1.00 | 18.65 | A | C |
| ATOM | 1811 | O | SER | A | 342 | 197.544 | 167.157 | -14.414 | 1.00 | 17.15 | A | O |
| ATOM | 1812 | N | ARG | A | 343 | 199.209 | 166.027 | -13.391 | 1.00 | 16.76 | A | N |
| ATOM | 1813 | CA | ARG | A | 343 | 199.187 | 164.881 | -14.291 | 1.00 | 16.82 | A | C |

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|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 1814 | CB | ARG | A | 343 | 200.563 | 164.214 | -14.356 | 1.00 | 19.40 | A | C |
| ATOM | 1815 | CG | ARG | A | 343 | 201.744 | 165.034 | -14.873 | 1.00 | 20.85 | A | C |
| ATOM | 1816 | CD | ARG | A | 343 | 202.986 | 164.139 | -14.768 | 1.00 | 22.63 | A | C |
| ATOM | 1817 | NE | ARG | A | 343 | 204.181 | 164.667 | -15.420 | 1.00 | 29.67 | A | N |
| ATOM | 1818 | CZ | ARG | A | 343 | 205.296 | 163.964 | -15.619 | 1.00 | 29.30 | A | C |
| ATOM | 1819 | NH1 | ARG | A | 343 | 205.362 | 162.702 | -15.211 | 1.00 | 27.60 | A | N |
| ATOM | 1820 | NH2 | ARG | A | 343 | 206.337 | 164.521 | -16.239 | 1.00 | 30.90 | A | N |
| ATOM | 1821 | C | ARG | A | 343 | 198.213 | 163.833 | -13.749 | 1.00 | 17.95 | A | C |
| ATOM | 1822 | O | ARG | A | 343 | 197.789 | 162.927 | -14.470 | 1.00 | 18.61 | A | O |
| ATOM | 1823 | N | VAL | A | 344 | 197.880 | 163.963 | -12.465 | 1.00 | 16.47 | A | N |
| ATOM | 1824 | CA | VAL | A | 344 | 197.014 | 163.027 | -11.767 | 1.00 | 15.15 | A | C |
| ATOM | 1825 | CB | VAL | A | 344 | 195.644 | 162.882 | -12.427 | 1.00 | 14.04 | A | C |
| ATOM | 1826 | CG1 | VAL | A | 344 | 194.791 | 161.919 | -11.603 | 1.00 | 14.73 | A | C |
| ATOM | 1827 | CG2 | VAL | A | 344 | 194.949 | 164.217 | -12.503 | 1.00 | 14.41 | A | C |
| ATOM | 1828 | C | VAL | A | 344 | 197.751 | 161.702 | -11.847 | 1.00 | 19.48 | A | C |
| ATOM | 1829 | O | VAL | A | 344 | 197.240 | 160.697 | -12.362 | 1.00 | 17.59 | A | O |
| ATOM | 1830 | N | GLU | A | 345 | 198.970 | 161.733 | -11.320 | 1.00 | 20.63 | A | N |
| ATOM | 1831 | CA | GLU | A | 345 | 199.883 | 160.600 | -11.314 | 1.00 | 21.68 | A | C |
| ATOM | 1832 | CB | GLU | A | 345 | 201.297 | 161.116 | -11.635 | 1.00 | 22.57 | A | C |
| ATOM | 1833 | CG | GLU | A | 345 | 202.291 | 160.066 | -12.115 | 1.00 | 29.02 | A | C |
| ATOM | 1834 | CD | GLU | A | 345 | 203.609 | 160.693 | -12.596 | 1.00 | 34.43 | A | C |
| ATOM | 1835 | OE1 | GLU | A | 345 | 203.572 | 161.826 | -13.143 | 1.00 | 41.54 | A | O |
| ATOM | 1836 | OE2 | GLU | A | 345 | 204.677 | 160.062 | -12.448 | 1.00 | 34.88 | A | O |
| ATOM | 1837 | C | GLU | A | 345 | 199.906 | 159.839 | -9.990 | 1.00 | 21.02 | A | C |
| ATOM | 1838 | O | GLU | A | 345 | 200.516 | 160.289 | -9.009 | 1.00 | 22.86 | A | O |
| ATOM | 1839 | N | PHE | A | 346 | 199.260 | 158.679 | -9.953 | 1.00 | 20.71 | A | N |
| ATOM | 1840 | CA | PHE | A | 346 | 199.268 | 157.868 | -8.730 | 1.00 | 20.54 | A | C |
| ATOM | 1841 | CB | PHE | A | 346 | 198.272 | 158.454 | -7.705 | 1.00 | 19.53 | A | C |
| ATOM | 1842 | CG | PHE | A | 346 | 196.835 | 158.138 | -8.013 | 1.00 | 21.11 | A | C |
| ATOM | 1843 | CD1 | PHE | A | 346 | 196.203 | 157.064 | -7.403 | 1.00 | 22.02 | A | C |
| ATOM | 1844 | CD2 | PHE | A | 346 | 196.130 | 158.888 | -8.936 | 1.00 | 18.36 | A | C |
| ATOM | 1845 | CE1 | PHE | A | 346 | 194.878 | 156.744 | -7.713 | 1.00 | 24.10 | A | C |
| ATOM | 1846 | CE2 | PHE | A | 346 | 194.807 | 158.574 | -9.253 | 1.00 | 23.07 | A | C |
| ATOM | 1847 | CZ | PHE | A | 346 | 194.181 | 157.500 | -8.640 | 1.00 | 22.64 | A | C |
| ATOM | 1848 | C | PHE | A | 346 | 198.893 | 156.424 | -9.065 | 1.00 | 19.41 | A | C |
| ATOM | 1849 | O | PHE | A | 346 | 198.376 | 156.142 | -10.153 | 1.00 | 21.26 | A | O |
| ATOM | 1850 | N | THR | A | 347 | 199.158 | 155.512 | -8.137 | 1.00 | 17.51 | A | N |
| ATOM | 1851 | CA | THR | A | 347 | 198.809 | 154.113 | -8.335 | 1.00 | 15.60 | A | C |
| ATOM | 1852 | CB | THR | A | 347 | 200.042 | 153.259 | -8.736 | 1.00 | 17.00 | A | C |
| ATOM | 1853 | OG1 | THR | A | 347 | 201.113 | 153.494 | -7.812 | 1.00 | 20.54 | A | O |
| ATOM | 1854 | CG2 | THR | A | 347 | 200.506 | 153.617 | -10.145 | 1.00 | 14.88 | A | C |
| ATOM | 1855 | C | THR | A | 347 | 198.245 | 153.623 | -7.026 | 1.00 | 14.01 | A | C |
| ATOM | 1856 | O | THR | A | 347 | 198.322 | 154.324 | -6.030 | 1.00 | 14.17 | A | O |
| ATOM | 1857 | N | PHE | A | 348 | 197.659 | 152.434 | -7.029 | 1.00 | 14.30 | A | N |
| ATOM | 1858 | CA | PHE | A | 348 | 197.097 | 151.875 | -5.809 | 1.00 | 15.62 | A | C |
| ATOM | 1859 | CB | PHE | A | 348 | 195.673 | 151.335 | -6.022 | 1.00 | 13.71 | A | C |
| ATOM | 1860 | CG | PHE | A | 348 | 194.678 | 152.345 | -6.553 | 1.00 | 14.90 | A | C |
| ATOM | 1861 | CD1 | PHE | A | 348 | 194.476 | 152.496 | -7.926 | 1.00 | 14.48 | A | C |
| ATOM | 1862 | CD2 | PHE | A | 348 | 193.915 | 153.115 | -5.678 | 1.00 | 14.25 | A | C |
| ATOM | 1863 | CE1 | PHE | A | 348 | 193.520 | 153.399 | -8.421 | 1.00 | 13.33 | A | C |
| ATOM | 1864 | CE2 | PHE | A | 348 | 192.956 | 154.020 | -6.160 | 1.00 | 12.61 | A | C |
| ATOM | 1865 | CZ | PHE | A | 348 | 192.758 | 154.162 | -7.530 | 1.00 | 13.12 | A | C |
| ATOM | 1866 | C | PHE | A | 348 | 197.936 | 150.690 | -5.379 | 1.00 | 17.39 | A | C |
| ATOM | 1867 | O | PHE | A | 348 | 198.493 | 149.986 | -6.222 | 1.00 | 17.79 | A | O |
| ATOM | 1868 | N | PRO | A | 349 | 198.077 | 150.478 | -4.060 | 1.00 | 19.22 | A | N |
| ATOM | 1869 | CD | PRO | A | 349 | 197.716 | 151.428 | -2.984 | 1.00 | 20.64 | A | C |
| ATOM | 1870 | CA | PRO | A | 349 | 198.843 | 149.326 | -3.550 | 1.00 | 18.28 | A | C |
| ATOM | 1871 | CB | PRO | A | 349 | 198.881 | 149.550 | -2.034 | 1.00 | 19.47 | A | C |
| ATOM | 1872 | CG | PRO | A | 349 | 198.663 | 151.042 | -1.874 | 1.00 | 21.78 | A | C |
| ATOM | 1873 | C | PRO | A | 349 | 197.913 | 148.144 | -3.906 | 1.00 | 18.89 | A | C |
| ATOM | 1874 | O | PRO | A | 349 | 196.765 | 148.365 | -4.282 | 1.00 | 18.06 | A | O |
| ATOM | 1875 | N | ASP | A | 350 | 198.360 | 146.901 | -3.778 | 1.00 | 22.60 | A | N |
| ATOM | 1876 | CA | ASP | A | 350 | 197.488 | 145.780 | -4.137 | 1.00 | 24.29 | A | C |
| ATOM | 1877 | CB | ASP | A | 350 | 198.312 | 144.494 | -4.298 | 1.00 | 28.79 | A | C |
| ATOM | 1878 | CG | ASP | A | 350 | 199.378 | 144.608 | -5.404 | 1.00 | 33.91 | A | C |
| ATOM | 1879 | OD1 | ASP | A | 350 | 200.001 | 143.575 | -5.741 | 1.00 | 33.53 | A | O |
| ATOM | 1880 | OD2 | ASP | A | 350 | 199.591 | 145.733 | -5.928 | 1.00 | 35.29 | A | O |
| ATOM | 1881 | C | ASP | A | 350 | 196.293 | 145.489 | -3.238 | 1.00 | 23.99 | A | C |
| ATOM | 1882 | O | ASP | A | 350 | 195.352 | 144.835 | -3.671 | 1.00 | 23.48 | A | O |
| ATOM | 1883 | N | PHE | A | 351 | 196.279 | 145.964 | -2.003 | 1.00 | 22.20 | A | N |

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|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 1884 | CA | PHE | A | 351 | 195.125 | 145.636 | -1.171 | 1.00 | 23.75 | A | C |
| ATOM | 1885 | CB | PHE | A | 351 | 195.510 | 145.662 | 0.300 | 1.00 | 22.72 | A | C |
| ATOM | 1886 | CG | PHE | A | 351 | 196.082 | 146.956 | 0.738 | 1.00 | 20.40 | A | C |
| ATOM | 1887 | CD1 | PHE | A | 351 | 197.451 | 147.151 | 0.756 | 1.00 | 17.28 | A | C |
| ATOM | 1888 | CD2 | PHE | A | 351 | 195.245 | 147.994 | 1.111 | 1.00 | 19.08 | A | C |
| ATOM | 1889 | CE1 | PHE | A | 351 | 197.983 | 148.379 | 1.142 | 1.00 | 21.72 | A | C |
| ATOM | 1890 | CE2 | PHE | A | 351 | 195.761 | 149.217 | 1.497 | 1.00 | 19.31 | A | C |
| ATOM | 1891 | CZ | PHE | A | 351 | 197.128 | 149.417 | 1.515 | 1.00 | 20.15 | A | C |
| ATOM | 1892 | C | PHE | A | 351 | 193.883 | 146.509 | -1.382 | 1.00 | 24.86 | A | C |
| ATOM | 1893 | O | PHE | A | 351 | 192.826 | 146.215 | -0.820 | 1.00 | 26.36 | A | O |
| ATOM | 1894 | N | VAL | A | 352 | 193.999 | 147.575 | -2.174 | 1.00 | 22.98 | A | N |
| ATOM | 1895 | CA | VAL | A | 352 | 192.845 | 148.431 | -2.428 | 1.00 | 22.53 | A | C |
| ATOM | 1896 | CB | VAL | A | 352 | 193.297 | 149.810 | -2.976 | 1.00 | 19.91 | A | C |
| ATOM | 1897 | CG1 | VAL | A | 352 | 192.105 | 150.680 | -3.293 | 1.00 | 15.94 | A | C |
| ATOM | 1898 | CG2 | VAL | A | 352 | 194.164 | 150.489 | -1.936 | 1.00 | 17.58 | A | C |
| ATOM | 1899 | C | VAL | A | 352 | 191.941 | 147.702 | -3.416 | 1.00 | 22.85 | A | C |
| ATOM | 1900 | O | VAL | A | 352 | 192.351 | 147.406 | -4.541 | 1.00 | 25.56 | A | O |
| ATOM | 1901 | N | THR | A | 353 | 190.722 | 147.393 | -2.985 | 1.00 | 20.20 | A | N |
| ATOM | 1902 | CA | THR | A | 353 | 189.786 | 146.668 | -3.833 | 1.00 | 20.47 | A | C |
| ATOM | 1903 | CB | THR | A | 353 | 188.530 | 146.264 | -3.059 | 1.00 | 18.44 | A | C |
| ATOM | 1904 | OG1 | THR | A | 353 | 187.777 | 147.445 | -2.740 | 1.00 | 19.14 | A | O |
| ATOM | 1905 | CG2 | THR | A | 353 | 188.915 | 145.544 | -1.786 | 1.00 | 15.00 | A | C |
| ATOM | 1906 | C | THR | A | 353 | 189.331 | 147.452 | -5.049 | 1.00 | 23.02 | A | C |
| ATOM | 1907 | O | THR | A | 353 | 189.525 | 148.665 | -5.144 | 1.00 | 21.93 | A | O |
| ATOM | 1908 | N | GLU | A | 354 | 188.685 | 146.733 | -5.960 | 1.00 | 23.98 | A | N |
| ATOM | 1909 | CA | GLU | A | 354 | 188.175 | 147.274 | -7.208 | 1.00 | 25.43 | A | C |
| ATOM | 1910 | CB | GLU | A | 354 | 187.543 | 146.130 | -8.001 | 1.00 | 30.21 | A | C |
| ATOM | 1911 | CG | GLU | A | 354 | 186.780 | 146.540 | -9.261 | 1.00 | 37.82 | A | C |
| ATOM | 1912 | CD | GLU | A | 354 | 186.031 | 145.351 | -9.890 | 1.00 | 41.79 | A | C |
| ATOM | 1913 | OE1 | GLU | A | 354 | 185.501 | 145.472 | -11.025 | 1.00 | 43.51 | A | O |
| ATOM | 1914 | OE2 | GLU | A | 354 | 185.974 | 144.281 | -9.224 | 1.00 | 44.80 | A | O |
| ATOM | 1915 | C | GLU | A | 354 | 187.175 | 148.424 | -7.055 | 1.00 | 24.34 | A | C |
| ATOM | 1916 | O | GLU | A | 354 | 187.182 | 149.386 | -7.840 | 1.00 | 24.85 | A | O |
| ATOM | 1917 | N | GLY | A | 355 | 186.298 | 148.303 | -6.065 | 1.00 | 20.96 | A | N |
| ATOM | 1918 | CA | GLY | A | 355 | 185.289 | 149.314 | -5.842 | 1.00 | 13.82 | A | C |
| ATOM | 1919 | C | GLY | A | 355 | 185.908 | 150.595 | -5.333 | 1.00 | 16.94 | A | C |
| ATOM | 1920 | O | GLY | A | 355 | 185.529 | 151.694 | -5.760 | 1.00 | 13.60 | A | O |
| ATOM | 1921 | N | ALA | A | 356 | 186.868 | 150.473 | -4.425 | 1.00 | 15.45 | A | N |
| ATOM | 1922 | CA | ALA | A | 356 | 187.501 | 151.674 | -3.909 | 1.00 | 19.10 | A | C |
| ATOM | 1923 | CB | ALA | A | 356 | 188.475 | 151.326 | -2.761 | 1.00 | 18.64 | A | C |
| ATOM | 1924 | C | ALA | A | 356 | 188.235 | 152.381 | -5.068 | 1.00 | 19.08 | A | C |
| ATOM | 1925 | O | ALA | A | 356 | 188.203 | 153.604 | -5.162 | 1.00 | 16.84 | A | O |
| ATOM | 1926 | N | ARG | A | 357 | 188.874 | 151.611 | -5.951 | 1.00 | 18.44 | A | N |
| ATOM | 1927 | CA | ARG | A | 357 | 189.586 | 152.184 | -7.100 | 1.00 | 18.13 | A | C |
| ATOM | 1928 | CB | ARG | A | 357 | 190.349 | 151.113 | -7.881 | 1.00 | 16.00 | A | C |
| ATOM | 1929 | CG | ARG | A | 357 | 191.447 | 150.447 | -7.112 | 1.00 | 15.75 | A | C |
| ATOM | 1930 | CD | ARG | A | 357 | 192.125 | 149.414 | -7.941 | 1.00 | 14.24 | A | C |
| ATOM | 1931 | NE | ARG | A | 357 | 193.120 | 148.721 | -7.139 | 1.00 | 18.00 | A | N |
| ATOM | 1932 | CZ | ARG | A | 357 | 194.249 | 148.203 | -7.607 | 1.00 | 18.74 | A | C |
| ATOM | 1933 | NH1 | ARG | A | 357 | 194.553 | 148.285 | -8.898 | 1.00 | 21.62 | A | N |
| ATOM | 1934 | NH2 | ARG | A | 357 | 195.097 | 147.622 | -6.768 | 1.00 | 20.49 | A | N |
| ATOM | 1935 | C | ARG | A | 357 | 188.627 | 152.856 | -8.062 | 1.00 | 17.28 | A | C |
| ATOM | 1936 | O | ARG | A | 357 | 188.949 | 153.878 | -8.637 | 1.00 | 16.53 | A | O |
| ATOM | 1937 | N | ASP | A | 358 | 187.454 | 152.272 | -8.261 | 1.00 | 17.73 | A | N |
| ATOM | 1938 | CA | ASP | A | 358 | 186.511 | 152.887 | -9.176 | 1.00 | 17.93 | A | C |
| ATOM | 1939 | CB | ASP | A | 358 | 185.267 | 152.024 | -9.389 | 1.00 | 21.16 | A | C |
| ATOM | 1940 | CG | ASP | A | 358 | 184.269 | 152.688 | -10.327 | 1.00 | 23.93 | A | C |
| ATOM | 1941 | OD1 | ASP | A | 358 | 184.508 | 152.671 | -11.559 | 1.00 | 29.93 | A | O |
| ATOM | 1942 | OD2 | ASP | A | 358 | 183.266 | 153.257 | -9.840 | 1.00 | 22.82 | A | O |
| ATOM | 1943 | C | ASP | A | 358 | 186.081 | 154.234 | -8.611 | 1.00 | 17.83 | A | C |
| ATOM | 1944 | O | ASP | A | 358 | 185.996 | 155.206 | -9.348 | 1.00 | 20.18 | A | O |
| ATOM | 1945 | N | LEU | A | 359 | 185.823 | 154.299 | -7.303 | 1.00 | 16.69 | A | N |
| ATOM | 1946 | CA | LEU | A | 359 | 185.389 | 155.543 | -6.680 | 1.00 | 15.23 | A | C |
| ATOM | 1947 | CB | LEU | A | 359 | 184.873 | 155.292 | -5.250 | 1.00 | 13.90 | A | C |
| ATOM | 1948 | CG | LEU | A | 359 | 184.459 | 156.568 | -4.482 | 1.00 | 15.76 | A | C |
| ATOM | 1949 | CD1 | LEU | A | 359 | 183.222 | 157.164 | -5.105 | 1.00 | 14.16 | A | C |
| ATOM | 1950 | CD2 | LEU | A | 359 | 184.210 | 156.266 | -3.027 | 1.00 | 16.19 | A | C |
| ATOM | 1951 | C | LEU | A | 359 | 186.478 | 156.623 | -6.646 | 1.00 | 15.38 | A | C |
| ATOM | 1952 | O | LEU | A | 359 | 186.234 | 157.740 | -7.071 | 1.00 | 16.61 | A | O |
| ATOM | 1953 | N | ILE | A | 360 | 187.661 | 156.300 | -6.132 | 1.00 | 15.08 | A | N |

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|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 1954 | CA | ILE | A | 360 | 188.737 | 157.280 | -6.054 | 1.00 | 16.09 | A | C |
| ATOM | 1955 | CB | ILE | A | 360 | 189.972 | 156.694 | -5.305 | 1.00 | 13.18 | A | C |
| ATOM | 1956 | CG2 | ILE | A | 360 | 191.132 | 157.645 | -5.348 | 1.00 | 8.95 | A | C |
| ATOM | 1957 | CG1 | ILE | A | 360 | 189.613 | 156.445 | -3.843 | 1.00 | 11.43 | A | C |
| ATOM | 1958 | CD1 | ILE | A | 360 | 190.486 | 155.406 | -3.211 | 1.00 | 15.13 | A | C |
| ATOM | 1959 | C | ILE | A | 360 | 189.126 | 157.752 | -7.457 | 1.00 | 18.67 | A | C |
| ATOM | 1960 | O | ILE | A | 360 | 189.433 | 158.935 | -7.652 | 1.00 | 19.76 | A | O |
| ATOM | 1961 | N | SER | A | 361 | 189.099 | 156.841 | -8.427 | 1.00 | 17.86 | A | N |
| ATOM | 1962 | CA | SER | A | 361 | 189.437 | 157.193 | -9.792 | 1.00 | 17.51 | A | C |
| ATOM | 1963 | CB | SER | A | 361 | 189.511 | 155.952 | -10.682 | 1.00 | 18.17 | A | C |
| ATOM | 1964 | OG | SER | A | 361 | 190.686 | 155.223 | -10.384 | 1.00 | 20.30 | A | O |
| ATOM | 1965 | C | SER | A | 361 | 188.438 | 158.163 | -10.382 | 1.00 | 18.63 | A | C |
| ATOM | 1966 | O | SER | A | 361 | 188.805 | 159.011 | -11.209 | 1.00 | 19.26 | A | O |
| ATOM | 1967 | N | ARG | A | 362 | 187.175 | 158.051 | -9.977 | 1.00 | 18.68 | A | N |
| ATOM | 1968 | CA | ARG | A | 362 | 186.156 | 158.973 | -10.492 | 1.00 | 17.96 | A | C |
| ATOM | 1969 | CB | ARG | A | 362 | 184.740 | 158.464 | -10.227 | 1.00 | 18.15 | A | C |
| ATOM | 1970 | CG | ARG | A | 362 | 184.389 | 157.189 | -10.948 | 1.00 | 21.87 | A | C |
| ATOM | 1971 | CD | ARG | A | 362 | 182.950 | 156.762 | -10.710 | 1.00 | 24.92 | A | C |
| ATOM | 1972 | NE | ARG | A | 362 | 182.669 | 155.532 | -11.449 | 1.00 | 31.73 | A | N |
| ATOM | 1973 | CZ | ARG | A | 362 | 182.150 | 155.461 | -12.682 | 1.00 | 35.25 | A | C |
| ATOM | 1974 | NH1 | ARG | A | 362 | 181.805 | 156.557 | -13.358 | 1.00 | 34.91 | A | N |
| ATOM | 1975 | NH2 | ARG | A | 362 | 182.052 | 154.276 | -13.281 | 1.00 | 35.12 | A | N |
| ATOM | 1976 | C | ARG | A | 362 | 186.287 | 160.332 | -9.817 | 1.00 | 16.66 | A | C |
| ATOM | 1977 | O | ARG | A | 362 | 186.086 | 161.367 | -10.452 | 1.00 | 21.59 | A | O |
| ATOM | 1978 | N | LEU | A | 363 | 186.602 | 160.348 | -8.527 | 1.00 | 15.31 | A | N |
| ATOM | 1979 | CA | LEU | A | 363 | 186.726 | 161.620 | -7.814 | 1.00 | 15.39 | A | C |
| ATOM | 1980 | CB | LEU | A | 363 | 186.758 | 161.376 | -6.295 | 1.00 | 13.54 | A | C |
| ATOM | 1981 | CG | LEU | A | 363 | 185.452 | 160.880 | -5.638 | 1.00 | 14.63 | A | C |
| ATOM | 1982 | CD1 | LEU | A | 363 | 185.723 | 160.358 | -4.216 | 1.00 | 12.73 | A | C |
| ATOM | 1983 | CD2 | LEU | A | 363 | 184.423 | 162.005 | -5.613 | 1.00 | 7.80 | A | C |
| ATOM | 1984 | C | LEU | A | 363 | 187.989 | 162.357 | -8.252 | 1.00 | 16.50 | A | C |
| ATOM | 1985 | O | LEU | A | 363 | 188.033 | 163.593 | -8.252 | 1.00 | 16.60 | A | O |
| ATOM | 1986 | N | LEU | A | 364 | 189.008 | 161.597 | -8.656 | 1.00 | 17.23 | A | N |
| ATOM | 1987 | CA | LEU | A | 364 | 190.285 | 162.182 | -9.051 | 1.00 | 20.15 | A | C |
| ATOM | 1988 | CB | LEU | A | 364 | 191.419 | 161.335 | -8.467 | 1.00 | 18.29 | A | C |
| ATOM | 1989 | CG | LEU | A | 364 | 191.504 | 161.377 | -6.926 | 1.00 | 20.11 | A | C |
| ATOM | 1990 | CD1 | LEU | A | 364 | 192.737 | 160.607 | -6.509 | 1.00 | 16.10 | A | C |
| ATOM | 1991 | CD2 | LEU | A | 364 | 191.576 | 162.820 | -6.413 | 1.00 | 16.30 | A | C |
| ATOM | 1992 | C | LEU | A | 364 | 190.474 | 162.393 | -10.557 | 1.00 | 19.92 | A | C |
| ATOM | 1993 | O | LEU | A | 364 | 191.511 | 162.052 | -11.143 | 1.00 | 20.12 | A | O |
| ATOM | 1994 | N | LYS | A | 365 | 189.450 | 162.967 | -11.169 | 1.00 | 19.36 | A | N |
| ATOM | 1995 | CA | LYS | A | 365 | 189.461 | 163.275 | -12.581 | 1.00 | 19.00 | A | C |
| ATOM | 1996 | CB | LYS | A | 365 | 188.039 | 163.289 | -13.117 | 1.00 | 22.47 | A | C |
| ATOM | 1997 | CG | LYS | A | 365 | 187.417 | 161.929 | -13.243 | 1.00 | 23.42 | A | C |
| ATOM | 1998 | CD | LYS | A | 365 | 188.039 | 161.224 | -14.400 | 1.00 | 23.31 | A | C |
| ATOM | 1999 | CE | LYS | A | 365 | 187.320 | 159.930 | -14.693 | 1.00 | 24.89 | A | C |
| ATOM | 2000 | NZ | LYS | A | 365 | 187.970 | 159.249 | -15.851 | 1.00 | 30.35 | A | N |
| ATOM | 2001 | C | LYS | A | 365 | 190.039 | 164.670 | -12.715 | 1.00 | 18.75 | A | C |
| ATOM | 2002 | O | LYS | A | 365 | 189.654 | 165.568 | -11.956 | 1.00 | 15.64 | A | O |
| ATOM | 2003 | N | HIS | A | 366 | 190.949 | 164.850 | -13.676 | 1.00 | 17.07 | A | N |
| ATOM | 2004 | CA | HIS | A | 366 | 191.568 | 166.150 | -13.920 | 1.00 | 17.25 | A | C |
| ATOM | 2005 | CB | HIS | A | 366 | 192.611 | 166.038 | -15.043 | 1.00 | 15.66 | A | C |
| ATOM | 2006 | CG | HIS | A | 366 | 193.302 | 167.331 | -15.352 | 1.00 | 18.71 | A | C |
| ATOM | 2007 | CD2 | HIS | A | 366 | 194.437 | 167.877 | -14.849 | 1.00 | 17.17 | A | C |
| ATOM | 2008 | ND1 | HIS | A | 366 | 192.763 | 168.283 | -16.194 | 1.00 | 19.79 | A | N |
| ATOM | 2009 | CE1 | HIS | A | 366 | 193.530 | 169.361 | -16.187 | 1.00 | 18.47 | A | C |
| ATOM | 2010 | NE2 | HIS | A | 366 | 194.552 | 169.141 | -15.378 | 1.00 | 18.20 | A | N |
| ATOM | 2011 | C | HIS | A | 366 | 190.493 | 167.186 | -14.291 | 1.00 | 17.88 | A | C |
| ATOM | 2012 | O | HIS | A | 366 | 190.553 | 168.334 | -13.864 | 1.00 | 14.94 | A | O |
| ATOM | 2013 | N | ASN | A | 367 | 189.500 | 166.769 | -15.071 | 1.00 | 19.37 | A | N |
| ATOM | 2014 | CA | ASN | A | 367 | 188.436 | 167.676 | -15.490 | 1.00 | 22.11 | A | C |
| ATOM | 2015 | CB | ASN | A | 367 | 187.841 | 167.205 | -16.823 | 1.00 | 24.11 | A | C |
| ATOM | 2016 | CG | ASN | A | 367 | 186.929 | 168.246 | -17.452 | 1.00 | 29.29 | A | C |
| ATOM | 2017 | OD1 | ASN | A | 367 | 185.990 | 168.718 | -16.827 | 1.00 | 34.30 | A | O |
| ATOM | 2018 | ND2 | ASN | A | 367 | 187.209 | 168.611 | -18.688 | 1.00 | 31.42 | A | N |
| ATOM | 2019 | C | ASN | A | 367 | 187.348 | 167.721 | -14.412 | 1.00 | 22.00 | A | C |
| ATOM | 2020 | O | ASN | A | 367 | 186.644 | 166.739 | -14.198 | 1.00 | 21.37 | A | O |
| ATOM | 2021 | N | PRO | A | 368 | 187.174 | 168.881 | -13.751 | 1.00 | 22.13 | A | N |
| ATOM | 2022 | CD | PRO | A | 368 | 187.763 | 170.174 | -14.151 | 1.00 | 21.11 | A | C |
| ATOM | 2023 | CA | PRO | A | 368 | 186.181 | 169.073 | -12.682 | 1.00 | 21.45 | A | C |

| | | | | | | | | | | | | |
|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 2024 | CB | PRO | A | 368 | 186.292 | 170.571 | -12.377 | 1.00 | 23.08 | A | C |
| ATOM | 2025 | CG | PRO | A | 368 | 187.705 | 170.942 | -12.864 | 1.00 | 19.70 | A | C |
| ATOM | 2026 | C | PRO | A | 368 | 184.755 | 168.638 | -13.047 | 1.00 | 22.70 | A | C |
| ATOM | 2027 | O | PRO | A | 368 | 184.016 | 168.091 | -12.209 | 1.00 | 21.09 | A | O |
| ATOM | 2028 | N | SER | A | 369 | 184.386 | 168.865 | -14.303 | 1.00 | 21.10 | A | N |
| ATOM | 2029 | CA | SER | A | 369 | 183.068 | 168.492 | -14.818 | 1.00 | 25.15 | A | C |
| ATOM | 2030 | CB | SER | A | 369 | 182.919 | 168.982 | -16.263 | 1.00 | 25.61 | A | C |
| ATOM | 2031 | OG | SER | A | 369 | 183.115 | 170.391 | -16.341 | 1.00 | 37.93 | A | O |
| ATOM | 2032 | C | SER | A | 369 | 182.809 | 166.986 | -14.785 | 1.00 | 23.28 | A | C |
| ATOM | 2033 | O | SER | A | 369 | 181.685 | 166.555 | -14.591 | 1.00 | 26.91 | A | O |
| ATOM | 2034 | N | GLN | A | 370 | 183.848 | 166.196 | -14.995 | 1.00 | 20.71 | A | N |
| ATOM | 2035 | CA | GLN | A | 370 | 183.744 | 164.749 | -15.009 | 1.00 | 21.53 | A | C |
| ATOM | 2036 | CB | GLN | A | 370 | 184.922 | 164.172 | -15.785 | 1.00 | 24.23 | A | C |
| ATOM | 2037 | CG | GLN | A | 370 | 184.674 | 164.178 | -17.279 | 1.00 | 31.18 | A | C |
| ATOM | 2038 | CD | GLN | A | 370 | 185.948 | 164.183 | -18.045 | 1.00 | 38.83 | A | C |
| ATOM | 2039 | OE1 | GLN | A | 370 | 186.879 | 163.380 | -17.767 | 1.00 | 41.58 | A | O |
| ATOM | 2040 | NE2 | GLN | A | 370 | 186.033 | 165.098 | -19.038 | 1.00 | 43.83 | A | N |
| ATOM | 2041 | C | GLN | A | 370 | 183.688 | 164.073 | -13.665 | 1.00 | 20.69 | A | C |
| ATOM | 2042 | O | GLN | A | 370 | 183.444 | 162.864 | -13.600 | 1.00 | 19.42 | A | O |
| ATOM | 2043 | N | ARG | A | 371 | 183.940 | 164.804 | -12.585 | 1.00 | 18.88 | A | N |
| ATOM | 2044 | CA | ARG | A | 371 | 183.906 | 164.189 | -11.252 | 1.00 | 21.24 | A | C |
| ATOM | 2045 | CB | ARG | A | 371 | 184.612 | 165.072 | -10.231 | 1.00 | 17.55 | A | C |
| ATOM | 2046 | CG | ARG | A | 371 | 186.104 | 165.158 | -10.394 | 1.00 | 15.36 | A | C |
| ATOM | 2047 | CD | ARG | A | 371 | 186.643 | 166.286 | -9.564 | 1.00 | 11.86 | A | C |
| ATOM | 2048 | NE | ARG | A | 371 | 187.913 | 166.739 | -10.108 | 1.00 | 12.57 | A | N |
| ATOM | 2049 | CZ | ARG | A | 371 | 188.440 | 167.951 | -9.938 | 1.00 | 14.14 | A | C |
| ATOM | 2050 | NH1 | ARG | A | 371 | 187.817 | 168.878 | -9.216 | 1.00 | 10.91 | A | N |
| ATOM | 2051 | NH2 | ARG | A | 371 | 189.583 | 168.257 | -10.545 | 1.00 | 9.48 | A | N |
| ATOM | 2052 | C | ARG | A | 371 | 182.440 | 164.038 | -10.854 | 1.00 | 22.37 | A | C |
| ATOM | 2053 | O | ARG | A | 371 | 181.601 | 164.841 | -11.176 | 1.00 | 22.50 | A | O |
| ATOM | 2054 | N | PRO | A | 372 | 182.141 | 162.957 | -10.111 | 1.00 | 23.64 | A | N |
| ATOM | 2055 | CD | PRO | A | 372 | 183.165 | 162.051 | -9.512 | 1.00 | 23.75 | A | C |
| ATOM | 2056 | CA | PRO | A | 372 | 180.757 | 162.663 | -9.653 | 1.00 | 21.80 | A | C |
| ATOM | 2057 | CB | PRO | A | 372 | 180.923 | 161.269 | -9.007 | 1.00 | 22.29 | A | C |
| ATOM | 2058 | CG | PRO | A | 372 | 182.365 | 161.227 | -8.548 | 1.00 | 22.92 | A | C |
| ATOM | 2059 | C | PRO | A | 372 | 180.160 | 163.726 | -8.739 | 1.00 | 21.72 | A | C |
| ATOM | 2060 | O | PRO | A | 372 | 180.875 | 164.579 | -8.217 | 1.00 | 23.11 | A | O |
| ATOM | 2061 | N | MET | A | 373 | 178.840 | 163.740 | -8.654 | 1.00 | 20.67 | A | N |
| ATOM | 2062 | CA | MET | A | 373 | 178.153 | 164.668 | -7.731 | 1.00 | 19.68 | A | C |
| ATOM | 2063 | CB | MET | A | 373 | 176.674 | 164.841 | -8.137 | 1.00 | 25.32 | A | C |
| ATOM | 2064 | CG | MET | A | 373 | 176.470 | 165.598 | -9.397 | 1.00 | 29.58 | A | C |
| ATOM | 2065 | SD | MET | A | 373 | 177.274 | 167.224 | -9.216 | 1.00 | 44.08 | A | S |
| ATOM | 2066 | CE | MET | A | 373 | 175.850 | 168.314 | -8.571 | 1.00 | 34.35 | A | C |
| ATOM | 2067 | C | MET | A | 373 | 178.231 | 163.942 | -6.368 | 1.00 | 18.77 | A | C |
| ATOM | 2068 | O | MET | A | 373 | 178.518 | 162.750 | -6.337 | 1.00 | 14.31 | A | O |
| ATOM | 2069 | N | LEU | A | 374 | 177.985 | 164.639 | -5.257 | 1.00 | 16.82 | A | N |
| ATOM | 2070 | CA | LEU | A | 374 | 178.041 | 163.984 | -3.959 | 1.00 | 17.05 | A | C |
| ATOM | 2071 | CB | LEU | A | 374 | 177.959 | 165.010 | -2.820 | 1.00 | 15.61 | A | C |
| ATOM | 2072 | CG | LEU | A | 374 | 179.224 | 165.888 | -2.751 | 1.00 | 17.98 | A | C |
| ATOM | 2073 | CD1 | LEU | A | 374 | 178.940 | 167.269 | -2.145 | 1.00 | 8.94 | A | C |
| ATOM | 2074 | CD2 | LEU | A | 374 | 180.290 | 165.125 | -1.973 | 1.00 | 12.26 | A | C |
| ATOM | 2075 | C | LEU | A | 374 | 176.934 | 162.915 | -3.837 | 1.00 | 18.65 | A | C |
| ATOM | 2076 | O | LEU | A | 374 | 177.122 | 161.885 | -3.201 | 1.00 | 19.21 | A | O |
| ATOM | 2077 | N | ARG | A | 375 | 175.804 | 163.167 | -4.504 | 1.00 | 18.78 | A | N |
| ATOM | 2078 | CA | ARG | A | 375 | 174.657 | 162.248 | -4.510 | 1.00 | 20.13 | A | C |
| ATOM | 2079 | CB | ARG | A | 375 | 173.504 | 162.813 | -5.210 | 1.00 | 21.87 | A | C |
| ATOM | 2080 | C | ARG | A | 375 | 175.033 | 160.942 | -5.178 | 1.00 | 21.00 | A | C |
| ATOM | 2081 | O | ARG | A | 375 | 174.457 | 159.916 | -4.909 | 1.00 | 21.05 | A | O |
| ATOM | 2082 | N | GLU | A | 376 | 175.970 | 161.009 | -6.106 | 1.00 | 23.11 | A | N |
| ATOM | 2083 | CA | GLU | A | 376 | 176.419 | 159.788 | -6.763 | 1.00 | 23.55 | A | C |
| ATOM | 2084 | CB | GLU | A | 376 | 177.142 | 160.139 | -8.053 | 1.00 | 24.82 | A | C |
| ATOM | 2085 | CG | GLU | A | 376 | 176.400 | 161.110 | -8.977 | 1.00 | 32.25 | A | C |
| ATOM | 2086 | CD | GLU | A | 376 | 177.239 | 161.561 | -10.206 | 1.00 | 34.95 | A | C |
| ATOM | 2087 | OE1 | GLU | A | 376 | 177.030 | 162.670 | -10.770 | 1.00 | 37.06 | A | O |
| ATOM | 2088 | OE2 | GLU | A | 376 | 178.110 | 160.783 | -10.630 | 1.00 | 37.87 | A | O |
| ATOM | 2089 | C | GLU | A | 376 | 177.380 | 158.962 | -5.852 | 1.00 | 23.36 | A | C |
| ATOM | 2090 | O | GLU | A | 376 | 177.448 | 157.712 | -5.874 | 1.00 | 25.32 | A | O |
| ATOM | 2091 | N | VAL | A | 377 | 178.204 | 159.683 | -5.113 | 1.00 | 20.65 | A | N |
| ATOM | 2092 | CA | VAL | A | 377 | 179.168 | 159.065 | -4.241 | 1.00 | 19.06 | A | C |
| ATOM | 2093 | CB | VAL | A | 377 | 180.021 | 160.117 | -3.550 | 1.00 | 20.25 | A | C |

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|------|------|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 2094 | CG1 | VAL | A | 377 | 180.772 | 159.513 | -2.415 | 1.00 | 14.07 | A | C |
| ATOM | 2095 | CG2 | VAL | A | 377 | 180.949 | 160.762 | -4.587 | 1.00 | 16.78 | A | C |
| ATOM | 2096 | C | VAL | A | 377 | 178.386 | 158.284 | -3.229 | 1.00 | 20.23 | A | C |
| ATOM | 2097 | O | VAL | A | 377 | 178.647 | 157.099 | -3.037 | 1.00 | 20.59 | A | O |
| ATOM | 2098 | N | LEU | A | 378 | 177.392 | 158.937 | -2.620 | 1.00 | 20.07 | A | N |
| ATOM | 2099 | CA | LEU | A | 378 | 176.526 | 158.314 | -1.619 | 1.00 | 20.48 | A | C |
| ATOM | 2100 | CB | LEU | A | 378 | 175.514 | 159.346 | -1.107 | 1.00 | 19.33 | A | C |
| ATOM | 2101 | CG | LEU | A | 378 | 175.794 | 160.087 | 0.237 | 1.00 | 25.33 | A | C |
| ATOM | 2102 | CD1 | LEU | A | 378 | 177.197 | 159.794 | 0.722 | 1.00 | 23.60 | A | C |
| ATOM | 2103 | CD2 | LEU | A | 378 | 175.575 | 161.610 | 0.073 | 1.00 | 20.05 | A | C |
| ATOM | 2104 | C | LEU | A | 378 | 175.812 | 157.030 | -2.120 | 1.00 | 22.64 | A | C |
| ATOM | 2105 | O | LEU | A | 378 | 175.497 | 156.130 | -1.318 | 1.00 | 21.93 | A | O |
| ATOM | 2106 | N | GLU | A | 379 | 175.612 | 156.930 | -3.435 | 1.00 | 19.85 | A | N |
| ATOM | 2107 | CA | GLU | A | 379 | 174.972 | 155.756 | -4.020 | 1.00 | 24.21 | A | C |
| ATOM | 2108 | CB | GLU | A | 379 | 174.038 | 156.118 | -5.171 | 1.00 | 29.18 | A | C |
| ATOM | 2109 | CG | GLU | A | 379 | 173.003 | 157.140 | -4.872 | 1.00 | 37.87 | A | C |
| ATOM | 2110 | CD | GLU | A | 379 | 172.172 | 157.458 | -6.104 | 1.00 | 44.63 | A | C |
| ATOM | 2111 | OE1 | GLU | A | 379 | 172.774 | 157.586 | -7.214 | 1.00 | 47.26 | A | O |
| ATOM | 2112 | OE2 | GLU | A | 379 | 170.924 | 157.587 | -5.961 | 1.00 | 46.30 | A | O |
| ATOM | 2113 | C | GLU | A | 379 | 175.989 | 154.817 | -4.623 | 1.00 | 22.35 | A | C |
| ATOM | 2114 | O | GLU | A | 379 | 175.607 | 153.788 | -5.180 | 1.00 | 22.07 | A | O |
| ATOM | 2115 | N | HIS | A | 380 | 177.268 | 155.165 | -4.555 | 1.00 | 20.53 | A | N |
| ATOM | 2116 | CA | HIS | A | 380 | 178.278 | 154.301 | -5.145 | 1.00 | 20.63 | A | C |
| ATOM | 2117 | CB | HIS | A | 380 | 179.683 | 154.909 | -4.995 | 1.00 | 15.41 | A | C |
| ATOM | 2118 | CG | HIS | A | 380 | 180.717 | 154.184 | -5.800 | 1.00 | 17.05 | A | C |
| ATOM | 2119 | CD2 | HIS | A | 380 | 181.309 | 154.493 | -6.982 | 1.00 | 16.91 | A | C |
| ATOM | 2120 | ND1 | HIS | A | 380 | 181.129 | 152.901 | -5.498 | 1.00 | 16.78 | A | N |
| ATOM | 2121 | CE1 | HIS | A | 380 | 181.918 | 152.453 | -6.459 | 1.00 | 16.66 | A | C |
| ATOM | 2122 | NE2 | HIS | A | 380 | 182.042 | 153.399 | -7.372 | 1.00 | 15.37 | A | N |
| ATOM | 2123 | C | HIS | A | 380 | 178.209 | 152.904 | -4.509 | 1.00 | 20.19 | A | C |
| ATOM | 2124 | O | HIS | A | 380 | 178.129 | 152.774 | -3.293 | 1.00 | 21.40 | A | O |
| ATOM | 2125 | N | PRO | A | 381 | 178.231 | 151.843 | -5.333 | 1.00 | 21.11 | A | N |
| ATOM | 2126 | CD | PRO | A | 381 | 178.446 | 151.912 | -6.792 | 1.00 | 20.62 | A | C |
| ATOM | 2127 | CA | PRO | A | 381 | 178.165 | 150.440 | -4.874 | 1.00 | 22.07 | A | C |
| ATOM | 2128 | CB | PRO | A | 381 | 178.512 | 149.635 | -6.139 | 1.00 | 23.24 | A | C |
| ATOM | 2129 | CG | PRO | A | 381 | 177.998 | 150.510 | -7.246 | 1.00 | 25.34 | A | C |
| ATOM | 2130 | C | PRO | A | 381 | 179.103 | 150.109 | -3.708 | 1.00 | 20.71 | A | C |
| ATOM | 2131 | O | PRO | A | 381 | 178.722 | 149.416 | -2.762 | 1.00 | 22.12 | A | O |
| ATOM | 2132 | N | TRP | A | 382 | 180.330 | 150.607 | -3.783 | 1.00 | 19.08 | A | N |
| ATOM | 2133 | CA | TRP | A | 382 | 181.307 | 150.367 | -2.733 | 1.00 | 18.09 | A | C |
| ATOM | 2134 | CB | TRP | A | 382 | 182.667 | 150.885 | -3.160 | 1.00 | 16.26 | A | C |
| ATOM | 2135 | CG | TRP | A | 382 | 183.757 | 150.595 | -2.180 | 1.00 | 17.75 | A | C |
| ATOM | 2136 | CD2 | TRP | A | 382 | 184.370 | 151.524 | -1.271 | 1.00 | 17.24 | A | C |
| ATOM | 2137 | CE2 | TRP | A | 382 | 185.366 | 150.816 | -0.559 | 1.00 | 16.47 | A | C |
| ATOM | 2138 | CE3 | TRP | A | 382 | 184.165 | 152.882 | -0.983 | 1.00 | 17.55 | A | C |
| ATOM | 2139 | CD1 | TRP | A | 382 | 184.389 | 149.398 | -1.986 | 1.00 | 14.76 | A | C |
| ATOM | 2140 | NE1 | TRP | A | 382 | 185.358 | 149.524 | -1.022 | 1.00 | 16.65 | A | N |
| ATOM | 2141 | CZ2 | TRP | A | 382 | 186.168 | 151.422 | 0.421 | 1.00 | 15.85 | A | C |
| ATOM | 2142 | CZ3 | TRP | A | 382 | 184.965 | 153.487 | -0.002 | 1.00 | 19.06 | A | C |
| ATOM | 2143 | CH2 | TRP | A | 382 | 185.951 | 152.754 | 0.687 | 1.00 | 17.35 | A | C |
| ATOM | 2144 | C | TRP | A | 382 | 180.898 | 151.042 | -1.431 | 1.00 | 18.11 | A | C |
| ATOM | 2145 | O | TRP | A | 382 | 181.045 | 150.467 | -0.352 | 1.00 | 19.08 | A | O |
| ATOM | 2146 | N | ILE | A | 383 | 180.391 | 152.266 | -1.533 | 1.00 | 18.03 | A | N |
| ATOM | 2147 | CA | ILE | A | 383 | 179.963 | 153.003 | -0.354 | 1.00 | 17.34 | A | C |
| ATOM | 2148 | CB | ILE | A | 383 | 179.585 | 154.460 | -0.709 | 1.00 | 15.70 | A | C |
| ATOM | 2149 | CG2 | ILE | A | 383 | 178.985 | 155.178 | 0.495 | 1.00 | 13.48 | A | C |
| ATOM | 2150 | CG1 | ILE | A | 383 | 180.841 | 155.212 | -1.132 | 1.00 | 8.79 | A | C |
| ATOM | 2151 | CD1 | ILE | A | 383 | 181.809 | 155.455 | 0.019 | 1.00 | 11.19 | A | C |
| ATOM | 2152 | C | ILE | A | 383 | 178.790 | 152.312 | 0.324 | 1.00 | 19.72 | A | C |
| ATOM | 2153 | O | ILE | A | 383 | 178.851 | 152.044 | 1.523 | 1.00 | 21.11 | A | O |
| ATOM | 2154 | N | THR | A | 384 | 177.739 | 151.994 | -0.428 | 1.00 | 18.67 | A | N |
| ATOM | 2155 | CA | THR | A | 384 | 176.585 | 151.336 | 0.180 | 1.00 | 21.04 | A | C |
| ATOM | 2156 | CB | THR | A | 384 | 175.352 | 151.287 | -0.784 | 1.00 | 22.27 | A | C |
| ATOM | 2157 | OG1 | THR | A | 384 | 175.657 | 150.457 | -1.912 | 1.00 | 23.10 | A | O |
| ATOM | 2158 | CG2 | THR | A | 384 | 174.969 | 152.706 | -1.271 | 1.00 | 15.14 | A | C |
| ATOM | 2159 | C | THR | A | 384 | 176.868 | 149.921 | 0.721 | 1.00 | 20.77 | A | C |
| ATOM | 2160 | O | THR | A | 384 | 176.220 | 149.496 | 1.683 | 1.00 | 24.40 | A | O |
| ATOM | 2161 | N | ALA | A | 385 | 177.835 | 149.206 | 0.138 | 1.00 | 18.85 | A | N |
| ATOM | 2162 | CA | ALA | A | 385 | 178.195 | 147.848 | 0.598 | 1.00 | 16.58 | A | C |
| ATOM | 2163 | CB | ALA | A | 385 | 178.996 | 147.119 | -0.481 | 1.00 | 8.89 | A | C |

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|------|------|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 2164 | C | ALA | A | 385 | 179.021 | 147.877 | 1.890 | 1.00 | 19.30 | A | C |
| ATOM | 2165 | O | ALA | A | 385 | 178.987 | 146.950 | 2.699 | 1.00 | 17.69 | A | O |
| ATOM | 2166 | N | ASN | A | 386 | 179.748 | 148.966 | 2.104 | 1.00 | 23.78 | A | N |
| ATOM | 2167 | CA | ASN | A | 386 | 180.614 | 149.059 | 3.274 | 1.00 | 24.44 | A | C |
| ATOM | 2168 | CB | ASN | A | 386 | 182.039 | 149.240 | 2.783 | 1.00 | 22.82 | A | C |
| ATOM | 2169 | CG | ASN | A | 386 | 182.509 | 148.051 | 1.997 | 1.00 | 22.92 | A | C |
| ATOM | 2170 | OD1 | ASN | A | 386 | 182.581 | 146.947 | 2.539 | 1.00 | 23.56 | A | O |
| ATOM | 2171 | ND2 | ASN | A | 386 | 182.807 | 148.251 | 0.706 | 1.00 | 20.68 | A | N |
| ATOM | 2172 | C | ASN | A | 386 | 180.305 | 150.133 | 4.291 | 1.00 | 25.32 | A | C |
| ATOM | 2173 | O | ASN | A | 386 | 180.891 | 150.175 | 5.366 | 1.00 | 25.70 | A | O |
| ATOM | 2174 | N | SER | A | 387 | 179.385 | 151.009 | 3.950 | 1.00 | 28.67 | A | N |
| ATOM | 2175 | CA | SER | A | 387 | 179.063 | 152.111 | 4.823 | 1.00 | 30.65 | A | C |
| ATOM | 2176 | CB | SER | A | 387 | 178.507 | 153.232 | 3.955 | 1.00 | 29.51 | A | C |
| ATOM | 2177 | OG | SER | A | 387 | 178.208 | 154.364 | 4.724 | 1.00 | 35.78 | A | O |
| ATOM | 2178 | C | SER | A | 387 | 178.063 | 151.687 | 5.890 | 1.00 | 32.67 | A | C |
| ATOM | 2179 | O | SER | A | 387 | 177.162 | 150.889 | 5.535 | 1.00 | 35.02 | A | O |
| ATOM | 2180 | OXT | SER | A | 387 | 178.173 | 152.164 | 7.055 | 1.00 | 35.90 | A | O |
| ATOM | 2181 | CB | SER | B | 7 | 187.273 | 195.899 | 10.921 | 1.00 | 30.72 | B | C |
| ATOM | 2182 | OG | SER | B | 7 | 185.919 | 195.490 | 11.062 | 1.00 | 28.92 | B | O |
| ATOM | 2183 | C | SER | B | 7 | 187.728 | 193.792 | 12.227 | 1.00 | 32.69 | B | C |
| ATOM | 2184 | O | SER | B | 7 | 187.932 | 192.918 | 11.331 | 1.00 | 33.35 | B | O |
| ATOM | 2185 | N | SER | B | 7 | 189.583 | 195.368 | 11.576 | 1.00 | 34.34 | B | N |
| ATOM | 2186 | CA | SER | B | 7 | 188.150 | 195.268 | 12.001 | 1.00 | 32.37 | B | C |
| ATOM | 2187 | N | TYR | B | 8 | 187.139 | 193.527 | 13.402 | 1.00 | 28.10 | B | N |
| ATOM | 2188 | CA | TYR | B | 8 | 186.671 | 192.188 | 13.775 | 1.00 | 25.10 | B | C |
| ATOM | 2189 | CB | TYR | B | 8 | 187.465 | 191.681 | 14.999 | 1.00 | 22.64 | B | C |
| ATOM | 2190 | CG | TYR | B | 8 | 188.962 | 191.579 | 14.731 | 1.00 | 22.03 | B | C |
| ATOM | 2191 | CD1 | TYR | B | 8 | 189.806 | 192.667 | 14.982 | 1.00 | 19.79 | B | C |
| ATOM | 2192 | CE1 | TYR | B | 8 | 191.153 | 192.623 | 14.642 | 1.00 | 19.33 | B | C |
| ATOM | 2193 | CD2 | TYR | B | 8 | 189.524 | 190.435 | 14.128 | 1.00 | 18.09 | B | C |
| ATOM | 2194 | CE2 | TYR | B | 8 | 190.881 | 190.391 | 13.775 | 1.00 | 18.91 | B | C |
| ATOM | 2195 | CZ | TYR | B | 8 | 191.686 | 191.488 | 14.038 | 1.00 | 20.94 | B | C |
| ATOM | 2196 | OH | TYR | B | 8 | 193.020 | 191.444 | 13.712 | 1.00 | 23.31 | B | O |
| ATOM | 2197 | C | TYR | B | 8 | 185.151 | 192.143 | 14.045 | 1.00 | 24.33 | B | C |
| ATOM | 2198 | O | TYR | B | 8 | 184.677 | 191.422 | 14.936 | 1.00 | 23.49 | B | O |
| ATOM | 2199 | N | SER | B | 9 | 184.410 | 192.931 | 13.263 | 1.00 | 24.49 | B | N |
| ATOM | 2200 | CA | SER | B | 9 | 182.945 | 193.017 | 13.314 | 1.00 | 24.46 | B | C |
| ATOM | 2201 | CB | SER | B | 9 | 182.455 | 194.444 | 13.006 | 1.00 | 23.56 | B | C |
| ATOM | 2202 | OG | SER | B | 9 | 182.756 | 195.336 | 14.059 | 1.00 | 29.98 | B | O |
| ATOM | 2203 | C | SER | B | 9 | 182.426 | 192.085 | 12.229 | 1.00 | 22.36 | B | C |
| ATOM | 2204 | O | SER | B | 9 | 182.469 | 192.408 | 11.035 | 1.00 | 22.10 | B | O |
| ATOM | 2205 | N | TYR | B | 10 | 181.926 | 190.938 | 12.653 | 1.00 | 20.97 | B | N |
| ATOM | 2206 | CA | TYR | B | 10 | 181.434 | 189.932 | 11.728 | 1.00 | 21.80 | B | C |
| ATOM | 2207 | CB | TYR | B | 10 | 182.099 | 188.582 | 12.063 | 1.00 | 21.23 | B | C |
| ATOM | 2208 | CG | TYR | B | 10 | 183.618 | 188.617 | 12.082 | 1.00 | 23.30 | B | C |
| ATOM | 2209 | CD1 | TYR | B | 10 | 184.345 | 187.694 | 12.836 | 1.00 | 24.95 | B | C |
| ATOM | 2210 | CE1 | TYR | B | 10 | 185.744 | 187.683 | 12.816 | 1.00 | 25.40 | B | C |
| ATOM | 2211 | CD2 | TYR | B | 10 | 184.331 | 189.542 | 11.311 | 1.00 | 23.55 | B | C |
| ATOM | 2212 | CE2 | TYR | B | 10 | 185.725 | 189.541 | 11.285 | 1.00 | 24.34 | B | C |
| ATOM | 2213 | CZ | TYR | B | 10 | 186.421 | 188.600 | 12.036 | 1.00 | 26.19 | B | C |
| ATOM | 2214 | OH | TYR | B | 10 | 187.800 | 188.526 | 11.956 | 1.00 | 31.92 | B | O |
| ATOM | 2215 | C | TYR | B | 10 | 179.918 | 189.807 | 11.832 | 1.00 | 21.84 | B | C |
| ATOM | 2216 | O | TYR | B | 10 | 179.334 | 190.098 | 12.872 | 1.00 | 22.91 | B | O |
| ATOM | 2217 | N | ASP | B | 11 | 179.283 | 189.372 | 10.754 | 1.00 | 19.80 | B | N |
| ATOM | 2218 | CA | ASP | B | 11 | 177.842 | 189.173 | 10.751 | 1.00 | 19.63 | B | C |
| ATOM | 2219 | CB | ASP | B | 11 | 177.308 | 189.274 | 9.310 | 1.00 | 21.09 | B | C |
| ATOM | 2220 | CG | ASP | B | 11 | 175.778 | 189.141 | 9.217 | 1.00 | 23.91 | B | C |
| ATOM | 2221 | OD1 | ASP | B | 11 | 175.093 | 188.957 | 10.256 | 1.00 | 24.67 | B | O |
| ATOM | 2222 | OD2 | ASP | B | 11 | 175.264 | 189.221 | 8.077 | 1.00 | 22.90 | B | O |
| ATOM | 2223 | C | ASP | B | 11 | 177.653 | 187.756 | 11.297 | 1.00 | 19.67 | B | C |
| ATOM | 2224 | O | ASP | B | 11 | 177.383 | 186.820 | 10.565 | 1.00 | 20.37 | B | O |
| ATOM | 2225 | N | ALA | B | 12 | 177.844 | 187.593 | 12.590 | 1.00 | 19.26 | B | N |
| ATOM | 2226 | CA | ALA | B | 12 | 177.696 | 186.285 | 13.174 | 1.00 | 19.72 | B | C |
| ATOM | 2227 | CB | ALA | B | 12 | 178.993 | 185.498 | 13.013 | 1.00 | 20.60 | B | C |
| ATOM | 2228 | C | ALA | B | 12 | 177.337 | 186.502 | 14.640 | 1.00 | 20.60 | B | C |
| ATOM | 2229 | O | ALA | B | 12 | 177.450 | 187.632 | 15.149 | 1.00 | 20.41 | B | O |
| ATOM | 2230 | N | PRO | B | 13 | 176.918 | 185.448 | 15.350 | 1.00 | 20.13 | B | N |
| ATOM | 2231 | CD | PRO | B | 13 | 176.769 | 184.055 | 14.907 | 1.00 | 17.56 | B | C |
| ATOM | 2232 | CA | PRO | B | 13 | 176.545 | 185.608 | 16.761 | 1.00 | 16.88 | B | C |
| ATOM | 2233 | CB | PRO | B | 13 | 175.959 | 184.246 | 17.137 | 1.00 | 16.25 | B | C |

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|------|------|-----|-----|---|----|---------|---------|--------|------|-------|---|---|
| ATOM | 2234 | CG | PRO | B | 13 | 175.670 | 183.563 | 15.811 | 1.00 | 18.64 | B | C |
| ATOM | 2235 | C | PRO | B | 13 | 177.663 | 186.014 | 17.728 | 1.00 | 17.09 | B | C |
| ATOM | 2236 | O | PRO | B | 13 | 178.797 | 185.573 | 17.590 | 1.00 | 17.90 | B | O |
| ATOM | 2237 | N | SER | B | 14 | 177.334 | 186.839 | 18.720 | 1.00 | 17.14 | B | N |
| ATOM | 2238 | CA | SER | B | 14 | 178.294 | 187.258 | 19.739 | 1.00 | 20.00 | B | C |
| ATOM | 2239 | CB | SER | B | 14 | 179.094 | 188.499 | 19.294 | 1.00 | 19.42 | B | C |
| ATOM | 2240 | OG | SER | B | 14 | 178.288 | 189.384 | 18.544 | 1.00 | 30.47 | B | O |
| ATOM | 2241 | C | SER | B | 14 | 177.587 | 187.518 | 21.069 | 1.00 | 18.32 | B | C |
| ATOM | 2242 | O | SER | B | 14 | 178.199 | 187.968 | 22.056 | 1.00 | 14.51 | B | O |
| ATOM | 2243 | N | ASP | B | 15 | 176.297 | 187.215 | 21.076 | 1.00 | 18.48 | B | N |
| ATOM | 2244 | CA | ASP | B | 15 | 175.445 | 187.376 | 22.248 | 1.00 | 23.79 | B | C |
| ATOM | 2245 | CB | ASP | B | 15 | 173.991 | 187.526 | 21.783 | 1.00 | 30.49 | B | C |
| ATOM | 2246 | CG | ASP | B | 15 | 173.676 | 188.932 | 21.226 | 1.00 | 39.83 | B | C |
| ATOM | 2247 | OD1 | ASP | B | 15 | 174.558 | 189.605 | 20.616 | 1.00 | 44.43 | B | O |
| ATOM | 2248 | OD2 | ASP | B | 15 | 172.510 | 189.378 | 21.401 | 1.00 | 45.45 | B | O |
| ATOM | 2249 | C | ASP | B | 15 | 175.569 | 186.172 | 23.199 | 1.00 | 21.79 | B | C |
| ATOM | 2250 | O | ASP | B | 15 | 175.594 | 185.035 | 22.754 | 1.00 | 22.39 | B | O |
| ATOM | 2251 | N | PHE | B | 16 | 175.660 | 186.432 | 24.500 | 1.00 | 21.47 | B | N |
| ATOM | 2252 | CA | PHE | B | 16 | 175.756 | 185.373 | 25.514 | 1.00 | 22.21 | B | C |
| ATOM | 2253 | CB | PHE | B | 16 | 175.700 | 185.993 | 26.930 | 1.00 | 19.46 | B | C |
| ATOM | 2254 | CG | PHE | B | 16 | 175.637 | 184.978 | 28.025 | 1.00 | 18.34 | B | C |
| ATOM | 2255 | CD1 | PHE | B | 16 | 176.789 | 184.362 | 28.491 | 1.00 | 18.98 | B | C |
| ATOM | 2256 | CD2 | PHE | B | 16 | 174.417 | 184.569 | 28.528 | 1.00 | 15.51 | B | C |
| ATOM | 2257 | CE1 | PHE | B | 16 | 176.716 | 183.339 | 29.435 | 1.00 | 18.59 | B | C |
| ATOM | 2258 | CE2 | PHE | B | 16 | 174.340 | 183.552 | 29.469 | 1.00 | 15.01 | B | C |
| ATOM | 2259 | CZ | PHE | B | 16 | 175.488 | 182.939 | 29.921 | 1.00 | 15.05 | B | C |
| ATOM | 2260 | C | PHE | B | 16 | 174.542 | 184.448 | 25.301 | 1.00 | 21.16 | B | C |
| ATOM | 2261 | O | PHE | B | 16 | 173.442 | 184.938 | 25.058 | 1.00 | 21.78 | B | O |
| ATOM | 2262 | N | ILE | B | 17 | 174.739 | 183.135 | 25.370 | 1.00 | 19.97 | B | N |
| ATOM | 2263 | CA | ILE | B | 17 | 173.652 | 182.163 | 25.182 | 1.00 | 20.86 | B | C |
| ATOM | 2264 | CB | ILE | B | 17 | 173.965 | 181.144 | 24.009 | 1.00 | 21.47 | B | C |
| ATOM | 2265 | CG2 | ILE | B | 17 | 172.988 | 179.964 | 24.011 | 1.00 | 11.76 | B | C |
| ATOM | 2266 | CG1 | ILE | B | 17 | 173.957 | 181.844 | 22.654 | 1.00 | 16.04 | B | C |
| ATOM | 2267 | CD1 | ILE | B | 17 | 174.760 | 181.051 | 21.631 | 1.00 | 18.42 | B | C |
| ATOM | 2268 | C | ILE | B | 17 | 173.478 | 181.318 | 26.439 | 1.00 | 21.56 | B | C |
| ATOM | 2269 | O | ILE | B | 17 | 174.462 | 180.965 | 27.086 | 1.00 | 23.11 | B | O |
| ATOM | 2270 | N | ASN | B | 18 | 172.227 | 181.002 | 26.778 | 1.00 | 24.87 | B | N |
| ATOM | 2271 | CA | ASN | B | 18 | 171.893 | 180.143 | 27.928 | 1.00 | 26.79 | B | C |
| ATOM | 2272 | CB | ASN | B | 18 | 170.485 | 180.437 | 28.427 | 1.00 | 26.34 | B | C |
| ATOM | 2273 | CG | ASN | B | 18 | 170.052 | 179.482 | 29.543 | 1.00 | 30.28 | B | C |
| ATOM | 2274 | OD1 | ASN | B | 18 | 170.753 | 178.519 | 29.870 | 1.00 | 30.01 | B | O |
| ATOM | 2275 | ND2 | ASN | B | 18 | 168.893 | 179.747 | 30.125 | 1.00 | 28.50 | B | N |
| ATOM | 2276 | C | ASN | B | 18 | 171.911 | 178.718 | 27.373 | 1.00 | 28.06 | B | C |
| ATOM | 2277 | O | ASN | B | 18 | 170.947 | 178.305 | 26.737 | 1.00 | 31.09 | B | O |
| ATOM | 2278 | N | PHE | B | 19 | 172.969 | 177.950 | 27.616 | 1.00 | 30.32 | B | N |
| ATOM | 2279 | CA | PHE | B | 19 | 173.027 | 176.599 | 27.050 | 1.00 | 32.46 | B | C |
| ATOM | 2280 | CB | PHE | B | 19 | 174.460 | 176.061 | 27.076 | 1.00 | 27.50 | B | C |
| ATOM | 2281 | CG | PHE | B | 19 | 175.430 | 176.837 | 26.214 | 1.00 | 22.59 | B | C |
| ATOM | 2282 | CD1 | PHE | B | 19 | 176.332 | 177.737 | 26.785 | 1.00 | 20.42 | B | C |
| ATOM | 2283 | CD2 | PHE | B | 19 | 175.426 | 176.682 | 24.831 | 1.00 | 21.89 | B | C |
| ATOM | 2284 | CE1 | PHE | B | 19 | 177.223 | 178.454 | 25.989 | 1.00 | 19.77 | B | C |
| ATOM | 2285 | CE2 | PHE | B | 19 | 176.312 | 177.398 | 24.021 | 1.00 | 18.13 | B | C |
| ATOM | 2286 | CZ | PHE | B | 19 | 177.206 | 178.291 | 24.605 | 1.00 | 19.50 | B | C |
| ATOM | 2287 | C | PHE | B | 19 | 172.086 | 175.529 | 27.618 | 1.00 | 36.90 | B | C |
| ATOM | 2288 | O | PHE | B | 19 | 172.063 | 174.397 | 27.124 | 1.00 | 41.31 | B | O |
| ATOM | 2289 | N | SER | B | 20 | 171.317 | 175.844 | 28.646 | 1.00 | 41.32 | B | N |
| ATOM | 2290 | CA | SER | B | 20 | 170.402 | 174.824 | 29.142 | 1.00 | 46.46 | B | C |
| ATOM | 2291 | CB | SER | B | 20 | 170.317 | 174.921 | 30.652 | 1.00 | 47.60 | B | C |
| ATOM | 2292 | OG | SER | B | 20 | 170.456 | 176.275 | 31.032 | 1.00 | 49.62 | B | O |
| ATOM | 2293 | C | SER | B | 20 | 169.029 | 175.021 | 28.496 | 1.00 | 48.43 | B | C |
| ATOM | 2294 | O | SER | B | 20 | 168.337 | 174.060 | 28.170 | 1.00 | 50.43 | B | O |
| ATOM | 2295 | N | SER | B | 21 | 168.645 | 176.275 | 28.286 | 1.00 | 50.08 | B | N |
| ATOM | 2296 | CA | SER | B | 21 | 167.349 | 176.574 | 27.676 | 1.00 | 50.65 | B | C |
| ATOM | 2297 | CB | SER | B | 21 | 166.742 | 177.810 | 28.317 | 1.00 | 49.82 | B | C |
| ATOM | 2298 | OG | SER | B | 21 | 167.467 | 178.945 | 27.866 | 1.00 | 50.01 | B | O |
| ATOM | 2299 | C | SER | B | 21 | 167.581 | 176.880 | 26.204 | 1.00 | 51.89 | B | C |
| ATOM | 2300 | O | SER | B | 21 | 166.843 | 176.336 | 25.325 | 1.00 | 51.53 | B | O |
| ATOM | 2301 | OXT | SER | B | 21 | 168.482 | 177.716 | 25.953 | 1.00 | 53.54 | B | O |
| ATOM | 2302 | CB | ASN | C | 30 | 165.336 | 177.781 | 10.155 | 1.00 | 41.18 | C | C |
| ATOM | 2303 | CG | ASN | C | 30 | 164.486 | 178.568 | 9.178 | 1.00 | 46.58 | C | C |

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|------|------|-----|-----|---|----|---------|---------|--------|------|-------|---|---|
| ATOM | 2304 | OD1 | ASN | C | 30 | 164.828 | 179.693 | 8.808 | 1.00 | 49.62 | C | O |
| ATOM | 2305 | ND2 | ASN | C | 30 | 163.363 | 177.973 | 8.740 | 1.00 | 49.11 | C | N |
| ATOM | 2306 | C | ASN | C | 30 | 167.301 | 179.381 | 10.314 | 1.00 | 36.00 | C | C |
| ATOM | 2307 | O | ASN | C | 30 | 167.202 | 179.731 | 9.143 | 1.00 | 34.36 | C | O |
| ATOM | 2308 | N | ASN | C | 30 | 165.267 | 179.744 | 11.676 | 1.00 | 37.72 | C | N |
| ATOM | 2309 | CA | ASN | C | 30 | 166.154 | 178.688 | 11.078 | 1.00 | 38.33 | C | C |
| ATOM | 2310 | N | ILE | C | 31 | 168.406 | 179.537 | 11.026 | 1.00 | 32.89 | C | N |
| ATOM | 2311 | CA | ILE | C | 31 | 169.605 | 180.229 | 10.589 | 1.00 | 28.57 | C | C |
| ATOM | 2312 | CB | ILE | C | 31 | 170.635 | 180.011 | 11.676 | 1.00 | 31.08 | C | C |
| ATOM | 2313 | CG2 | ILE | C | 31 | 171.873 | 180.840 | 11.426 | 1.00 | 30.71 | C | C |
| ATOM | 2314 | CG1 | ILE | C | 31 | 169.991 | 180.405 | 13.012 | 1.00 | 34.10 | C | C |
| ATOM | 2315 | CD1 | ILE | C | 31 | 169.738 | 181.909 | 13.147 | 1.00 | 41.37 | C | C |
| ATOM | 2316 | C | ILE | C | 31 | 170.254 | 180.041 | 9.214 | 1.00 | 25.67 | C | C |
| ATOM | 2317 | O | ILE | C | 31 | 170.816 | 180.996 | 8.677 | 1.00 | 20.90 | C | O |
| ATOM | 2318 | N | ASP | C | 32 | 170.188 | 178.856 | 8.623 | 1.00 | 23.52 | C | N |
| ATOM | 2319 | CA | ASP | C | 32 | 170.872 | 178.678 | 7.351 | 1.00 | 24.02 | C | C |
| ATOM | 2320 | CB | ASP | C | 32 | 171.126 | 177.197 | 7.086 | 1.00 | 27.28 | C | C |
| ATOM | 2321 | CG | ASP | C | 32 | 169.858 | 176.423 | 6.805 | 1.00 | 32.74 | C | C |
| ATOM | 2322 | OD1 | ASP | C | 32 | 168.852 | 177.009 | 6.338 | 1.00 | 36.15 | C | O |
| ATOM | 2323 | OD2 | ASP | C | 32 | 169.884 | 175.202 | 7.039 | 1.00 | 33.71 | C | O |
| ATOM | 2324 | C | ASP | C | 32 | 170.289 | 179.324 | 6.104 | 1.00 | 23.19 | C | C |
| ATOM | 2325 | O | ASP | C | 32 | 170.804 | 179.126 | 5.001 | 1.00 | 22.55 | C | O |
| ATOM | 2326 | N | SER | C | 33 | 169.223 | 180.090 | 6.271 | 1.00 | 21.46 | C | N |
| ATOM | 2327 | CA | SER | C | 33 | 168.608 | 180.781 | 5.136 | 1.00 | 22.57 | C | C |
| ATOM | 2328 | CB | SER | C | 33 | 167.205 | 181.244 | 5.499 | 1.00 | 23.28 | C | C |
| ATOM | 2329 | OG | SER | C | 33 | 166.326 | 180.142 | 5.639 | 1.00 | 33.59 | C | O |
| ATOM | 2330 | C | SER | C | 33 | 169.448 | 182.002 | 4.805 | 1.00 | 19.49 | C | C |
| ATOM | 2331 | O | SER | C | 33 | 169.273 | 182.639 | 3.770 | 1.00 | 20.33 | C | O |
| ATOM | 2332 | N | TRP | C | 34 | 170.344 | 182.330 | 5.728 | 1.00 | 18.04 | C | N |
| ATOM | 2333 | CA | TRP | C | 34 | 171.254 | 183.466 | 5.621 | 1.00 | 16.02 | C | C |
| ATOM | 2334 | CB | TRP | C | 34 | 172.234 | 183.422 | 6.792 | 1.00 | 15.82 | C | C |
| ATOM | 2335 | CG | TRP | C | 34 | 173.240 | 184.531 | 6.836 | 1.00 | 15.40 | C | C |
| ATOM | 2336 | CD2 | TRP | C | 34 | 174.599 | 184.462 | 6.404 | 1.00 | 13.15 | C | C |
| ATOM | 2337 | CE2 | TRP | C | 34 | 175.180 | 185.735 | 6.640 | 1.00 | 14.42 | C | C |
| ATOM | 2338 | CE3 | TRP | C | 34 | 175.387 | 183.451 | 5.843 | 1.00 | 10.87 | C | C |
| ATOM | 2339 | CD1 | TRP | C | 34 | 173.052 | 185.801 | 7.302 | 1.00 | 13.49 | C | C |
| ATOM | 2340 | NE1 | TRP | C | 34 | 174.212 | 186.530 | 7.189 | 1.00 | 11.42 | C | N |
| ATOM | 2341 | CZ2 | TRP | C | 34 | 176.523 | 186.024 | 6.330 | 1.00 | 14.91 | C | C |
| ATOM | 2342 | CZ3 | TRP | C | 34 | 176.727 | 183.738 | 5.538 | 1.00 | 12.26 | C | C |
| ATOM | 2343 | CH2 | TRP | C | 34 | 177.278 | 185.016 | 5.785 | 1.00 | 10.61 | C | C |
| ATOM | 2344 | C | TRP | C | 34 | 172.022 | 183.499 | 4.299 | 1.00 | 15.62 | C | C |
| ATOM | 2345 | O | TRP | C | 34 | 172.251 | 184.579 | 3.735 | 1.00 | 16.88 | C | O |
| ATOM | 2346 | N | PHE | C | 35 | 172.435 | 182.324 | 3.819 | 1.00 | 13.45 | C | N |
| ATOM | 2347 | CA | PHE | C | 35 | 173.191 | 182.222 | 2.567 | 1.00 | 12.33 | C | C |
| ATOM | 2348 | CB | PHE | C | 35 | 173.739 | 180.801 | 2.344 | 1.00 | 8.78 | C | C |
| ATOM | 2349 | CG | PHE | C | 35 | 174.597 | 180.304 | 3.456 | 1.00 | 9.30 | C | C |
| ATOM | 2350 | CD1 | PHE | C | 35 | 174.042 | 179.566 | 4.495 | 1.00 | 9.43 | C | C |
| ATOM | 2351 | CD2 | PHE | C | 35 | 175.960 | 180.610 | 3.500 | 1.00 | 9.38 | C | C |
| ATOM | 2352 | CE1 | PHE | C | 35 | 174.822 | 179.141 | 5.565 | 1.00 | 6.69 | C | C |
| ATOM | 2353 | CE2 | PHE | C | 35 | 176.749 | 180.190 | 4.569 | 1.00 | 8.62 | C | C |
| ATOM | 2354 | CZ | PHE | C | 35 | 176.174 | 179.455 | 5.602 | 1.00 | 10.55 | C | C |
| ATOM | 2355 | C | PHE | C | 35 | 172.367 | 182.623 | 1.351 | 1.00 | 13.51 | C | C |
| ATOM | 2356 | O | PHE | C | 35 | 172.779 | 183.502 | 0.597 | 1.00 | 13.63 | C | O |
| ATOM | 2357 | N | ALA | C | 36 | 171.207 | 181.997 | 1.153 | 1.00 | 14.52 | C | N |
| ATOM | 2358 | CA | ALA | C | 36 | 170.392 | 182.349 | -0.008 | 1.00 | 18.05 | C | C |
| ATOM | 2359 | CB | ALA | C | 36 | 169.246 | 181.349 | -0.209 | 1.00 | 13.28 | C | C |
| ATOM | 2360 | C | ALA | C | 36 | 169.844 | 183.775 | 0.103 | 1.00 | 18.08 | C | C |
| ATOM | 2361 | O | ALA | C | 36 | 169.797 | 184.500 | -0.899 | 1.00 | 20.25 | C | O |
| ATOM | 2362 | N | GLU | C | 37 | 169.458 | 184.192 | 1.307 | 1.00 | 18.61 | C | N |
| ATOM | 2363 | CA | GLU | C | 37 | 168.905 | 185.536 | 1.505 | 1.00 | 21.91 | C | C |
| ATOM | 2364 | CB | GLU | C | 37 | 168.391 | 185.686 | 2.933 | 1.00 | 22.41 | C | C |
| ATOM | 2365 | CG | GLU | C | 37 | 167.103 | 184.901 | 3.240 | 1.00 | 24.75 | C | C |
| ATOM | 2366 | CD | GLU | C | 37 | 166.619 | 185.133 | 4.681 | 1.00 | 30.55 | C | C |
| ATOM | 2367 | OE1 | GLU | C | 37 | 167.473 | 185.511 | 5.529 | 1.00 | 31.00 | C | O |
| ATOM | 2368 | OE2 | GLU | C | 37 | 165.414 | 184.932 | 4.976 | 1.00 | 30.11 | C | O |
| ATOM | 2369 | C | GLU | C | 37 | 169.913 | 186.649 | 1.194 | 1.00 | 22.74 | C | C |
| ATOM | 2370 | O | GLU | C | 37 | 169.561 | 187.754 | 0.791 | 1.00 | 22.40 | C | O |
| ATOM | 2371 | N | LYS | C | 38 | 171.181 | 186.332 | 1.375 | 1.00 | 25.80 | C | N |
| ATOM | 2372 | CA | LYS | C | 38 | 172.269 | 187.252 | 1.114 | 1.00 | 24.79 | C | C |
| ATOM | 2373 | CB | LYS | C | 38 | 173.438 | 186.831 | 1.982 | 1.00 | 27.15 | C | C |

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|------|------|-----|-----|---|-----|---------|---------|--------|------|-------|---|---|
| ATOM | 2374 | CG | LYS | C | 38 | 174.708 | 187.488 | 1.649 | 1.00 | 30.16 | C | C |
| ATOM | 2375 | CD | LYS | C | 38 | 175.776 | 187.057 | 2.622 | 1.00 | 31.96 | C | C |
| ATOM | 2376 | CE | LYS | C | 38 | 177.007 | 187.927 | 2.391 | 1.00 | 35.28 | C | C |
| ATOM | 2377 | NZ | LYS | C | 38 | 178.028 | 187.735 | 3.456 | 1.00 | 40.31 | C | N |
| ATOM | 2378 | C | LYS | C | 38 | 172.625 | 187.194 | -0.373 | 1.00 | 25.05 | C | C |
| ATOM | 2379 | O | LYS | C | 38 | 173.062 | 188.177 | -0.969 | 1.00 | 23.54 | C | O |
| ATOM | 2380 | N | ALA | C | 39 | 172.418 | 186.032 | -0.975 | 1.00 | 23.76 | C | N |
| ATOM | 2381 | CA | ALA | C | 39 | 172.687 | 185.849 | -2.400 | 1.00 | 23.35 | C | C |
| ATOM | 2382 | CB | ALA | C | 39 | 172.656 | 184.343 | -2.762 | 1.00 | 20.98 | C | C |
| ATOM | 2383 | C | ALA | C | 39 | 171.642 | 186.576 | -3.245 | 1.00 | 24.77 | C | C |
| ATOM | 2384 | O | ALA | C | 39 | 171.950 | 187.112 | -4.318 | 1.00 | 24.28 | C | O |
| ATOM | 2385 | N | ASN | C | 40 | 170.403 | 186.592 | -2.754 | 1.00 | 23.38 | C | N |
| ATOM | 2386 | CA | ASN | C | 40 | 169.306 | 187.210 | -3.480 | 1.00 | 23.68 | C | C |
| ATOM | 2387 | CB | ASN | C | 40 | 167.993 | 186.526 | -3.137 | 1.00 | 18.03 | C | C |
| ATOM | 2388 | CG | ASN | C | 40 | 168.024 | 185.035 | -3.395 | 1.00 | 17.89 | C | C |
| ATOM | 2389 | OD1 | ASN | C | 40 | 168.646 | 184.553 | -4.351 | 1.00 | 18.06 | C | O |
| ATOM | 2390 | ND2 | ASN | C | 40 | 167.325 | 184.287 | -2.545 | 1.00 | 16.76 | C | N |
| ATOM | 2391 | C | ASN | C | 40 | 169.122 | 188.701 | -3.279 | 1.00 | 25.17 | C | C |
| ATOM | 2392 | O | ASN | C | 40 | 168.413 | 189.332 | -4.052 | 1.00 | 27.11 | C | O |
| ATOM | 2393 | N | LEU | C | 41 | 169.731 | 189.268 | -2.246 | 1.00 | 26.95 | C | N |
| ATOM | 2394 | CA | LEU | C | 41 | 169.600 | 190.709 | -1.965 | 1.00 | 29.31 | C | C |
| ATOM | 2395 | CB | LEU | C | 41 | 170.380 | 191.047 | -0.705 | 1.00 | 29.88 | C | C |
| ATOM | 2396 | CG | LEU | C | 41 | 169.816 | 192.308 | -0.057 | 1.00 | 30.53 | C | C |
| ATOM | 2397 | CD1 | LEU | C | 41 | 168.319 | 192.148 | 0.221 | 1.00 | 30.41 | C | C |
| ATOM | 2398 | CD2 | LEU | C | 41 | 170.580 | 192.558 | 1.209 | 1.00 | 29.64 | C | C |
| ATOM | 2399 | C | LEU | C | 41 | 170.091 | 191.589 | -3.120 | 1.00 | 29.84 | C | C |
| ATOM | 2400 | O | LEU | C | 41 | 171.051 | 191.230 | -3.787 | 1.00 | 30.13 | C | O |
| ATOM | 2401 | N | GLU | C | 42 | 169.487 | 192.763 | -3.312 | 1.00 | 32.17 | C | N |
| ATOM | 2402 | CA | GLU | C | 42 | 169.851 | 193.627 | -4.439 | 1.00 | 35.33 | C | C |
| ATOM | 2403 | CB | GLU | C | 42 | 168.583 | 193.847 | -5.286 | 1.00 | 33.50 | C | C |
| ATOM | 2404 | CG | GLU | C | 42 | 167.819 | 192.560 | -5.616 | 1.00 | 32.30 | C | C |
| ATOM | 2405 | CD | GLU | C | 42 | 166.473 | 192.784 | -6.334 | 1.00 | 34.80 | C | C |
| ATOM | 2406 | OE1 | GLU | C | 42 | 165.892 | 193.892 | -6.241 | 1.00 | 34.22 | C | O |
| ATOM | 2407 | OE2 | GLU | C | 42 | 165.980 | 191.829 | -6.987 | 1.00 | 33.99 | C | O |
| ATOM | 2408 | C | GLU | C | 42 | 170.537 | 194.977 | -4.190 | 1.00 | 37.36 | C | C |
| ATOM | 2409 | O | GLU | C | 42 | 170.487 | 195.539 | -3.109 | 1.00 | 38.22 | C | O |
| ATOM | 2410 | N | ASN | C | 43 | 171.220 | 195.457 | -5.221 | 1.00 | 43.15 | C | N |
| ATOM | 2411 | CA | ASN | C | 43 | 171.863 | 196.790 | -5.266 | 1.00 | 48.74 | C | C |
| ATOM | 2412 | CB | ASN | C | 43 | 172.611 | 197.184 | -3.967 | 1.00 | 48.84 | C | C |
| ATOM | 2413 | CG | ASN | C | 43 | 173.769 | 196.255 | -3.632 | 1.00 | 50.97 | C | C |
| ATOM | 2414 | OD1 | ASN | C | 43 | 173.749 | 195.054 | -3.970 | 1.00 | 50.34 | C | O |
| ATOM | 2415 | ND2 | ASN | C | 43 | 174.793 | 196.804 | -2.939 | 1.00 | 51.10 | C | N |
| ATOM | 2416 | C | ASN | C | 43 | 172.809 | 196.704 | -6.455 | 1.00 | 52.67 | C | C |
| ATOM | 2417 | O | ASN | C | 43 | 172.493 | 197.379 | -7.493 | 1.00 | 54.34 | C | O |
| ATOM | 2418 | OXT | ASN | C | 43 | 173.808 | 195.931 | -6.344 | 1.00 | 55.98 | C | O |
| ATOM | 2419 | PB | ADP | S | 531 | 193.788 | 175.824 | 12.432 | 1.00 | 20.87 | S | P |
| ATOM | 2420 | O1B | ADP | S | 531 | 193.884 | 176.352 | 13.792 | 1.00 | 32.28 | S | O |
| ATOM | 2421 | O2B | ADP | S | 531 | 193.566 | 176.837 | 11.394 | 1.00 | 26.12 | S | O |
| ATOM | 2422 | O3B | ADP | S | 531 | 194.979 | 174.908 | 12.132 | 1.00 | 31.89 | S | O |
| ATOM | 2423 | PA | ADP | S | 531 | 191.748 | 174.063 | 13.545 | 1.00 | 18.35 | S | P |
| ATOM | 2424 | O1A | ADP | S | 531 | 190.611 | 174.901 | 14.032 | 1.00 | 26.99 | S | O |
| ATOM | 2425 | O2A | ADP | S | 531 | 191.357 | 172.755 | 12.954 | 1.00 | 26.80 | S | O |
| ATOM | 2426 | O3A | ADP | S | 531 | 192.532 | 174.874 | 12.450 | 1.00 | 28.14 | S | O |
| ATOM | 2427 | O5* | ADP | S | 531 | 192.642 | 173.906 | 14.839 | 1.00 | 22.21 | S | O |
| ATOM | 2428 | C5* | ADP | S | 531 | 193.768 | 172.965 | 14.869 | 1.00 | 20.71 | S | C |
| ATOM | 2429 | C4* | ADP | S | 531 | 193.594 | 171.623 | 15.640 | 1.00 | 17.30 | S | C |
| ATOM | 2430 | O4* | ADP | S | 531 | 192.923 | 171.842 | 16.897 | 1.00 | 18.08 | S | O |
| ATOM | 2431 | C3* | ADP | S | 531 | 192.751 | 170.494 | 14.997 | 1.00 | 17.80 | S | C |
| ATOM | 2432 | O3* | ADP | S | 531 | 193.561 | 169.824 | 14.038 | 1.00 | 18.78 | S | O |
| ATOM | 2433 | C2* | ADP | S | 531 | 192.369 | 169.659 | 16.218 | 1.00 | 19.78 | S | C |
| ATOM | 2434 | O2* | ADP | S | 531 | 193.423 | 168.749 | 16.615 | 1.00 | 19.10 | S | O |
| ATOM | 2435 | C1* | ADP | S | 531 | 192.152 | 170.704 | 17.312 | 1.00 | 18.01 | S | C |
| ATOM | 2436 | N9 | ADP | S | 531 | 190.711 | 171.169 | 17.445 | 1.00 | 18.12 | S | N |
| ATOM | 2437 | C8 | ADP | S | 531 | 190.169 | 172.237 | 16.808 | 1.00 | 20.72 | S | C |
| ATOM | 2438 | N7 | ADP | S | 531 | 188.877 | 172.431 | 17.108 | 1.00 | 19.94 | S | N |
| ATOM | 2439 | C5 | ADP | S | 531 | 188.596 | 171.408 | 17.961 | 1.00 | 15.87 | S | C |
| ATOM | 2440 | C6 | ADP | S | 531 | 187.377 | 171.071 | 18.652 | 1.00 | 14.49 | S | C |
| ATOM | 2441 | N6 | ADP | S | 531 | 186.260 | 171.696 | 18.563 | 1.00 | 9.66 | S | N |
| ATOM | 2442 | N1 | ADP | S | 531 | 187.474 | 169.935 | 19.454 | 1.00 | 13.01 | S | N |
| ATOM | 2443 | C2 | ADP | S | 531 | 188.642 | 169.198 | 19.595 | 1.00 | 14.56 | S | C |

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|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|------|
| ATOM | 2444 | N3 | ADP | S | 531 | 189.773 | 169.512 | 18.982 | 1.00 | 17.25 | S | N |
| ATOM | 2445 | C4 | ADP | S | 531 | 189.716 | 170.610 | 18.162 | 1.00 | 16.09 | S | C |
| ATOM | 2446 | MG | MG | X | 1 | 192.801 | 173.013 | 10.897 | 1.00 | 18.98 | X | MG+2 |
| ATOM | 2447 | MG | MG | X | 2 | 192.933 | 178.461 | 10.215 | 1.00 | 21.17 | X | MG+2 |
| ATOM | 2448 | MG | MG | X | 3 | 174.135 | 172.090 | -6.081 | 1.00 | 37.43 | X | MG+2 |
| ATOM | 2449 | S | SO4 | Y | 1 | 175.520 | 167.060 | -4.810 | 1.00 | 40.27 | Y | S |
| ATOM | 2450 | O1 | SO4 | Y | 1 | 175.005 | 168.134 | -3.755 | 1.00 | 40.61 | Y | O |
| ATOM | 2451 | O2 | SO4 | Y | 1 | 176.918 | 167.395 | -5.118 | 1.00 | 40.85 | Y | O |
| ATOM | 2452 | O3 | SO4 | Y | 1 | 175.333 | 165.874 | -4.319 | 1.00 | 45.29 | Y | O |
| ATOM | 2453 | O4 | SO4 | Y | 1 | 174.705 | 167.387 | -6.003 | 1.00 | 46.53 | Y | O |
| ATOM | 2454 | S | SO4 | Y | 2 | 196.317 | 160.442 | 22.149 | 1.00 | 52.91 | Y | S |
| ATOM | 2455 | O1 | SO4 | Y | 2 | 194.902 | 160.702 | 22.904 | 1.00 | 53.25 | Y | O |
| ATOM | 2456 | O2 | SO4 | Y | 2 | 197.156 | 161.615 | 22.484 | 1.00 | 52.23 | Y | O |
| ATOM | 2457 | O3 | SO4 | Y | 2 | 196.808 | 159.261 | 22.506 | 1.00 | 50.45 | Y | O |
| ATOM | 2458 | O4 | SO4 | Y | 2 | 195.932 | 160.567 | 20.717 | 1.00 | 53.17 | Y | O |
| ATOM | 2459 | S | SO4 | Y | 3 | 184.237 | 187.281 | -0.473 | 1.00 | 69.64 | Y | S |
| ATOM | 2460 | O1 | SO4 | Y | 3 | 182.905 | 188.209 | -0.613 | 1.00 | 70.60 | Y | O |
| ATOM | 2461 | O2 | SO4 | Y | 3 | 185.274 | 188.143 | 0.172 | 1.00 | 70.08 | Y | O |
| ATOM | 2462 | O3 | SO4 | Y | 3 | 183.925 | 186.181 | 0.170 | 1.00 | 69.68 | Y | O |
| ATOM | 2463 | O4 | SO4 | Y | 3 | 184.641 | 187.119 | -1.915 | 1.00 | 70.92 | Y | O |
| ATOM | 2464 | OH2 | WAT | W | 1 | 179.030 | 185.642 | -6.293 | 1.00 | 8.84 | W | O |
| ATOM | 2465 | OH2 | WAT | W | 2 | 194.313 | 179.202 | -8.444 | 1.00 | 16.79 | W | O |
| ATOM | 2466 | OH2 | WAT | W | 3 | 192.921 | 180.168 | 8.084 | 1.00 | 30.46 | W | O |
| ATOM | 2467 | OH2 | WAT | W | 4 | 187.994 | 175.656 | 4.804 | 1.00 | 16.00 | W | O |
| ATOM | 2468 | OH2 | WAT | W | 5 | 178.455 | 169.305 | -5.499 | 1.00 | 13.87 | W | O |
| ATOM | 2469 | OH2 | WAT | W | 6 | 197.111 | 180.066 | 22.244 | 1.00 | 15.19 | W | O |
| ATOM | 2470 | OH2 | WAT | W | 7 | 180.414 | 171.384 | 22.814 | 1.00 | 8.30 | W | O |
| ATOM | 2471 | OH2 | WAT | W | 8 | 188.179 | 184.543 | -6.390 | 1.00 | 10.24 | W | O |
| ATOM | 2472 | OH2 | WAT | W | 9 | 188.183 | 181.649 | 3.509 | 1.00 | 23.15 | W | O |
| ATOM | 2473 | OH2 | WAT | W | 10 | 185.065 | 157.114 | 14.496 | 1.00 | 16.39 | W | O |
| ATOM | 2474 | OH2 | WAT | W | 11 | 192.854 | 158.543 | 18.441 | 1.00 | 20.42 | W | O |
| ATOM | 2475 | OH2 | WAT | W | 12 | 194.144 | 171.703 | 11.618 | 1.00 | 13.61 | W | O |
| ATOM | 2476 | OH2 | WAT | W | 13 | 194.572 | 183.197 | -8.077 | 1.00 | 36.64 | W | O |
| ATOM | 2477 | OH2 | WAT | W | 14 | 198.254 | 147.344 | -7.377 | 1.00 | 23.99 | W | O |
| ATOM | 2478 | OH2 | WAT | W | 15 | 174.141 | 170.073 | -2.678 | 1.00 | 18.36 | W | O |
| ATOM | 2479 | OH2 | WAT | W | 16 | 197.136 | 162.247 | 7.860 | 1.00 | 20.24 | W | O |
| ATOM | 2480 | OH2 | WAT | W | 17 | 178.742 | 175.122 | -2.821 | 1.00 | 12.41 | W | O |
| ATOM | 2481 | OH2 | WAT | W | 18 | 200.365 | 168.406 | 2.165 | 1.00 | 9.98 | W | O |
| ATOM | 2482 | OH2 | WAT | W | 19 | 168.522 | 176.594 | 9.704 | 1.00 | 27.47 | W | O |
| ATOM | 2483 | OH2 | WAT | W | 20 | 193.215 | 179.995 | 11.973 | 1.00 | 17.15 | W | O |
| ATOM | 2484 | OH2 | WAT | W | 21 | 188.165 | 173.468 | 14.493 | 1.00 | 18.83 | W | O |
| ATOM | 2485 | OH2 | WAT | W | 22 | 178.977 | 189.493 | 5.006 | 1.00 | 25.99 | W | O |
| ATOM | 2486 | OH2 | WAT | W | 23 | 194.904 | 178.835 | 14.332 | 1.00 | 9.84 | W | O |
| ATOM | 2487 | OH2 | WAT | W | 24 | 172.594 | 187.824 | 25.336 | 1.00 | 22.88 | W | O |
| ATOM | 2488 | OH2 | WAT | W | 25 | 186.612 | 173.366 | -9.877 | 1.00 | 19.22 | W | O |
| ATOM | 2489 | OH2 | WAT | W | 26 | 176.840 | 183.702 | 20.193 | 1.00 | 22.57 | W | O |
| ATOM | 2490 | OH2 | WAT | W | 27 | 176.801 | 160.388 | 11.646 | 1.00 | 15.90 | W | O |
| ATOM | 2491 | OH2 | WAT | W | 28 | 178.487 | 174.788 | 11.702 | 1.00 | 18.10 | W | O |
| ATOM | 2492 | OH2 | WAT | W | 29 | 181.155 | 186.952 | 32.619 | 1.00 | 32.00 | W | O |
| ATOM | 2493 | OH2 | WAT | W | 30 | 209.304 | 163.564 | -16.281 | 1.00 | 27.44 | W | O |
| ATOM | 2494 | OH2 | WAT | W | 31 | 203.827 | 165.930 | -0.838 | 1.00 | 16.37 | W | O |
| ATOM | 2495 | OH2 | WAT | W | 32 | 183.937 | 190.638 | 21.333 | 1.00 | 17.02 | W | O |
| ATOM | 2496 | OH2 | WAT | W | 33 | 190.362 | 181.451 | 8.363 | 1.00 | 23.84 | W | O |
| ATOM | 2497 | OH2 | WAT | W | 34 | 201.524 | 183.136 | 11.412 | 1.00 | 27.78 | W | O |
| ATOM | 2498 | OH2 | WAT | W | 35 | 176.401 | 172.283 | 12.285 | 1.00 | 22.44 | W | O |
| ATOM | 2499 | OH2 | WAT | W | 36 | 191.486 | 178.801 | -8.556 | 1.00 | 14.47 | W | O |
| ATOM | 2500 | OH2 | WAT | W | 37 | 193.706 | 178.975 | 16.555 | 1.00 | 28.73 | W | O |
| ATOM | 2501 | OH2 | WAT | W | 38 | 200.711 | 191.015 | 5.492 | 1.00 | 22.39 | W | O |
| ATOM | 2502 | OH2 | WAT | W | 39 | 198.698 | 163.980 | -2.087 | 1.00 | 16.88 | W | O |
| ATOM | 2503 | OH2 | WAT | W | 40 | 186.096 | 174.714 | 13.402 | 1.00 | 14.25 | W | O |
| ATOM | 2504 | OH2 | WAT | W | 41 | 189.561 | 189.228 | 27.405 | 1.00 | 21.42 | W | O |
| ATOM | 2505 | OH2 | WAT | W | 42 | 185.742 | 175.020 | -12.633 | 1.00 | 32.61 | W | O |
| ATOM | 2506 | OH2 | WAT | W | 43 | 189.284 | 166.218 | 21.436 | 1.00 | 18.57 | W | O |
| ATOM | 2507 | OH2 | WAT | W | 44 | 189.806 | 150.396 | 10.582 | 1.00 | 17.00 | W | O |
| ATOM | 2508 | OH2 | WAT | W | 45 | 182.606 | 183.843 | 1.498 | 1.00 | 23.82 | W | O |
| ATOM | 2509 | OH2 | WAT | W | 46 | 203.088 | 159.272 | -4.093 | 1.00 | 20.75 | W | O |
| ATOM | 2510 | OH2 | WAT | W | 47 | 197.775 | 190.097 | 18.980 | 1.00 | 22.00 | W | O |
| ATOM | 2511 | OH2 | WAT | W | 48 | 193.113 | 164.352 | 18.292 | 1.00 | 18.52 | W | O |
| ATOM | 2512 | OH2 | WAT | W | 49 | 188.303 | 192.170 | 8.139 | 1.00 | 29.33 | W | O |
| ATOM | 2513 | OH2 | WAT | W | 50 | 178.988 | 188.073 | 29.292 | 1.00 | 22.03 | W | O |

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|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 2514 | OH2 | WAT | W | 51 | 179.041 | 176.835 | -4.879 | 1.00 | 28.93 | W | O |
| ATOM | 2515 | OH2 | WAT | W | 52 | 177.094 | 169.275 | 14.745 | 1.00 | 17.83 | W | O |
| ATOM | 2516 | OH2 | WAT | W | 53 | 173.359 | 158.848 | 5.717 | 1.00 | 26.69 | W | O |
| ATOM | 2517 | OH2 | WAT | W | 54 | 184.713 | 145.517 | -1.099 | 1.00 | 25.66 | W | O |
| ATOM | 2518 | OH2 | WAT | W | 55 | 197.989 | 162.673 | 24.709 | 1.00 | 31.35 | W | O |
| ATOM | 2519 | OH2 | WAT | W | 56 | 190.279 | 149.132 | -0.366 | 1.00 | 23.37 | W | O |
| ATOM | 2520 | OH2 | WAT | W | 57 | 175.195 | 156.308 | 1.515 | 1.00 | 25.31 | W | O |
| ATOM | 2521 | OH2 | WAT | W | 58 | 189.320 | 149.244 | 12.871 | 1.00 | 39.74 | W | O |
| ATOM | 2522 | OH2 | WAT | W | 59 | 191.345 | 160.562 | 17.366 | 1.00 | 19.61 | W | O |
| ATOM | 2523 | OH2 | WAT | W | 60 | 209.300 | 189.438 | 10.191 | 1.00 | 32.59 | W | O |
| ATOM | 2524 | OH2 | WAT | W | 61 | 176.961 | 195.154 | 23.343 | 1.00 | 26.84 | W | O |
| ATOM | 2525 | OH2 | WAT | W | 62 | 194.908 | 178.479 | 10.038 | 1.00 | 12.42 | W | O |
| ATOM | 2526 | OH2 | WAT | W | 63 | 192.932 | 176.681 | 8.727 | 1.00 | 17.49 | W | O |
| ATOM | 2527 | OH2 | WAT | W | 64 | 191.151 | 178.650 | 10.287 | 1.00 | 25.58 | W | O |
| ATOM | 2528 | OH2 | WAT | W | 65 | 182.000 | 183.023 | -13.348 | 1.00 | 15.88 | W | O |
| ATOM | 2529 | OH2 | WAT | W | 66 | 174.844 | 179.377 | 29.234 | 1.00 | 21.85 | W | O |
| ATOM | 2530 | OH2 | WAT | W | 67 | 192.666 | 150.025 | 4.037 | 1.00 | 24.70 | W | O |
| ATOM | 2531 | OH2 | WAT | W | 68 | 191.227 | 167.117 | 19.848 | 1.00 | 27.52 | W | O |
| ATOM | 2532 | OH2 | WAT | W | 69 | 195.798 | 166.787 | -4.678 | 1.00 | 16.05 | W | O |
| ATOM | 2533 | OH2 | WAT | W | 70 | 188.683 | 164.953 | 24.250 | 1.00 | 16.65 | W | O |
| ATOM | 2534 | OH2 | WAT | W | 71 | 202.921 | 187.953 | 5.807 | 1.00 | 25.48 | W | O |
| ATOM | 2535 | OH2 | WAT | W | 72 | 173.656 | 180.838 | -1.296 | 1.00 | 19.16 | W | O |
| ATOM | 2536 | OH2 | WAT | W | 73 | 178.223 | 170.722 | 21.753 | 1.00 | 28.96 | W | O |
| ATOM | 2537 | OH2 | WAT | W | 74 | 200.047 | 185.273 | 4.691 | 1.00 | 36.63 | W | O |
| ATOM | 2538 | OH2 | WAT | W | 75 | 199.421 | 160.492 | 21.694 | 1.00 | 54.41 | W | O |
| ATOM | 2539 | OH2 | WAT | W | 76 | 174.343 | 151.575 | -4.090 | 1.00 | 24.22 | W | O |
| ATOM | 2540 | OH2 | WAT | W | 77 | 199.217 | 156.232 | 8.084 | 1.00 | 24.50 | W | O |
| ATOM | 2541 | OH2 | WAT | W | 78 | 186.693 | 195.451 | 15.184 | 1.00 | 30.28 | W | O |
| ATOM | 2542 | OH2 | WAT | W | 79 | 204.072 | 167.051 | -16.474 | 1.00 | 30.81 | W | O |
| ATOM | 2543 | OH2 | WAT | W | 80 | 189.729 | 170.883 | 13.071 | 1.00 | 24.00 | W | O |
| ATOM | 2544 | OH2 | WAT | W | 81 | 193.562 | 167.033 | 18.576 | 1.00 | 34.40 | W | O |
| ATOM | 2545 | OH2 | WAT | W | 82 | 188.055 | 177.150 | -16.174 | 1.00 | 39.31 | W | O |
| ATOM | 2546 | OH2 | WAT | W | 83 | 209.167 | 161.801 | -3.764 | 1.00 | 29.76 | W | O |
| ATOM | 2547 | OH2 | WAT | W | 84 | 189.954 | 187.203 | -3.104 | 1.00 | 30.21 | W | O |
| ATOM | 2548 | OH2 | WAT | W | 85 | 166.356 | 175.210 | 9.226 | 1.00 | 35.64 | W | O |
| ATOM | 2549 | OH2 | WAT | W | 86 | 209.038 | 162.643 | -13.951 | 1.00 | 29.71 | W | O |
| ATOM | 2550 | OH2 | WAT | W | 87 | 179.913 | 164.861 | 20.417 | 1.00 | 23.03 | W | O |
| ATOM | 2551 | OH2 | WAT | W | 88 | 176.985 | 177.272 | 13.711 | 1.00 | 28.39 | W | O |
| ATOM | 2552 | OH2 | WAT | W | 89 | 197.775 | 160.663 | 10.355 | 1.00 | 30.90 | W | O |
| ATOM | 2553 | OH2 | WAT | W | 90 | 180.418 | 156.423 | -15.983 | 1.00 | 38.69 | W | O |
| ATOM | 2554 | OH2 | WAT | W | 91 | 197.603 | 165.048 | 7.104 | 1.00 | 39.85 | W | O |
| ATOM | 2555 | OH2 | WAT | W | 92 | 201.038 | 146.684 | -3.627 | 1.00 | 28.72 | W | O |
| ATOM | 2556 | OH2 | WAT | W | 93 | 191.798 | 173.307 | -1.526 | 1.00 | 20.55 | W | O |
| ATOM | 2557 | OH2 | WAT | W | 94 | 195.433 | 186.638 | 2.426 | 1.00 | 32.36 | W | O |
| ATOM | 2558 | OH2 | WAT | W | 95 | 185.689 | 149.073 | 10.194 | 1.00 | 32.44 | W | O |
| ATOM | 2559 | OH2 | WAT | W | 96 | 181.725 | 186.361 | 4.468 | 1.00 | 44.13 | W | O |
| ATOM | 2560 | OH2 | WAT | W | 97 | 190.638 | 181.376 | 1.418 | 1.00 | 40.50 | W | O |
| ATOM | 2561 | OH2 | WAT | W | 98 | 203.221 | 164.983 | 2.765 | 1.00 | 30.78 | W | O |
| ATOM | 2562 | OH2 | WAT | W | 99 | 191.430 | 148.459 | 1.931 | 1.00 | 29.87 | W | O |
| ATOM | 2563 | OH2 | WAT | W | 100 | 172.186 | 178.856 | -0.480 | 1.00 | 35.57 | W | O |
| ATOM | 2564 | OH2 | WAT | W | 101 | 195.541 | 178.234 | 1.979 | 1.00 | 25.17 | W | O |
| ATOM | 2565 | OH2 | WAT | W | 102 | 170.598 | 187.029 | 21.078 | 1.00 | 24.60 | W | O |
| ATOM | 2566 | OH2 | WAT | W | 103 | 175.607 | 172.274 | -8.036 | 1.00 | 36.47 | W | O |
| ATOM | 2567 | OH2 | WAT | W | 104 | 168.429 | 188.864 | -6.367 | 1.00 | 22.94 | W | O |
| ATOM | 2568 | OH2 | WAT | W | 105 | 186.340 | 190.812 | 24.666 | 1.00 | 32.99 | W | O |
| ATOM | 2569 | OH2 | WAT | W | 106 | 201.816 | 192.555 | 4.023 | 1.00 | 28.31 | W | O |
| ATOM | 2570 | OH2 | WAT | W | 107 | 202.504 | 159.814 | -7.441 | 1.00 | 22.58 | W | O |
| ATOM | 2571 | OH2 | WAT | W | 108 | 174.542 | 185.298 | -11.131 | 1.00 | 31.96 | W | O |
| ATOM | 2572 | OH2 | WAT | W | 109 | 175.457 | 179.403 | 15.662 | 1.00 | 39.35 | W | O |
| ATOM | 2573 | OH2 | WAT | W | 110 | 196.564 | 193.700 | 7.818 | 1.00 | 32.38 | W | O |
| ATOM | 2574 | OH2 | WAT | W | 111 | 173.232 | 181.808 | -8.349 | 1.00 | 19.06 | W | O |
| ATOM | 2575 | OH2 | WAT | W | 112 | 182.827 | 187.517 | -4.364 | 1.00 | 45.61 | W | O |
| ATOM | 2576 | OH2 | WAT | W | 113 | 189.838 | 194.231 | 7.217 | 1.00 | 42.16 | W | O |
| ATOM | 2577 | OH2 | WAT | W | 114 | 191.170 | 159.628 | -12.340 | 1.00 | 35.35 | W | O |
| ATOM | 2578 | OH2 | WAT | W | 115 | 191.207 | 184.866 | -0.535 | 1.00 | 34.38 | W | O |
| ATOM | 2579 | OH2 | WAT | W | 116 | 183.572 | 197.288 | 15.706 | 1.00 | 39.58 | W | O |
| ATOM | 2580 | OH2 | WAT | W | 117 | 199.841 | 150.695 | 13.176 | 1.00 | 35.40 | W | O |
| ATOM | 2581 | OH2 | WAT | W | 118 | 174.316 | 180.622 | 18.227 | 1.00 | 29.36 | W | O |
| ATOM | 2582 | OH2 | WAT | W | 119 | 174.539 | 169.945 | 15.478 | 1.00 | 36.75 | W | O |
| ATOM | 2583 | OH2 | WAT | W | 120 | 186.965 | 189.198 | 27.316 | 1.00 | 33.73 | W | O |

| | | | | | | | | | | | | |
|------|------|-----|-----|---|-----|---------|---------|---------|------|-------|---|---|
| ATOM | 2584 | OH2 | WAT | W | 121 | 185.505 | 146.137 | -4.208 | 1.00 | 30.91 | W | O |
| ATOM | 2585 | OH2 | WAT | W | 122 | 168.783 | 176.131 | 0.277 | 1.00 | 37.59 | W | O |
| ATOM | 2586 | OH2 | WAT | W | 123 | 179.830 | 187.974 | 34.894 | 1.00 | 39.81 | W | O |
| ATOM | 2587 | OH2 | WAT | W | 124 | 194.391 | 191.022 | 26.003 | 1.00 | 35.26 | W | O |
| ATOM | 2588 | OH2 | WAT | W | 125 | 175.707 | 190.116 | 18.448 | 1.00 | 37.47 | W | O |
| ATOM | 2589 | OH2 | WAT | W | 126 | 172.799 | 187.052 | 31.328 | 1.00 | 38.58 | W | O |
| ATOM | 2590 | OH2 | WAT | W | 127 | 173.867 | 181.212 | 14.618 | 1.00 | 28.93 | W | O |
| ATOM | 2591 | OH2 | WAT | W | 128 | 169.850 | 183.554 | 9.734 | 1.00 | 31.19 | W | O |
| ATOM | 2592 | OH2 | WAT | W | 129 | 201.846 | 186.034 | 10.890 | 1.00 | 39.65 | W | O |
| ATOM | 2593 | OH2 | WAT | W | 130 | 192.261 | 183.101 | 8.973 | 1.00 | 35.20 | W | O |
| ATOM | 2594 | OH2 | WAT | W | 131 | 195.036 | 155.601 | 22.286 | 1.00 | 43.08 | W | O |
| ATOM | 2595 | OH2 | WAT | W | 132 | 188.136 | 149.463 | -10.689 | 1.00 | 31.69 | W | O |
| ATOM | 2596 | OH2 | WAT | W | 133 | 193.611 | 166.439 | 22.911 | 1.00 | 37.73 | W | O |
| ATOM | 2597 | OH2 | WAT | W | 134 | 169.159 | 198.181 | -6.371 | 1.00 | 34.05 | W | O |
| ATOM | 2598 | OH2 | WAT | W | 135 | 173.141 | 166.101 | 3.246 | 1.00 | 37.73 | W | O |
| ATOM | 2599 | OH2 | WAT | W | 136 | 196.411 | 181.887 | 24.452 | 1.00 | 31.18 | W | O |
| ATOM | 2600 | OH2 | WAT | W | 137 | 166.875 | 190.046 | -8.389 | 1.00 | 35.44 | W | O |
| ATOM | 2601 | OH2 | WAT | W | 138 | 168.310 | 173.985 | 5.026 | 1.00 | 36.83 | W | O |
| ATOM | 2602 | OH2 | WAT | W | 139 | 191.553 | 162.337 | -15.173 | 1.00 | 30.34 | W | O |
| ATOM | 2603 | OH2 | WAT | W | 140 | 196.789 | 179.956 | 0.077 | 1.00 | 34.96 | W | O |
| ATOM | 2604 | OH2 | WAT | W | 141 | 204.362 | 177.082 | -3.998 | 1.00 | 42.74 | W | O |
| ATOM | 2605 | OH2 | WAT | W | 142 | 178.237 | 157.118 | 15.427 | 1.00 | 37.51 | W | O |
| ATOM | 2606 | OH2 | WAT | W | 143 | 180.703 | 166.918 | 18.919 | 1.00 | 22.25 | W | O |
| ATOM | 2607 | OH2 | WAT | W | 144 | 190.076 | 196.775 | 13.865 | 1.00 | 38.81 | W | O |

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